SECTION PG

POWER SUPPLY, GROUND & CIRCUIT ELEMENTS

CONTENTS

PRECAUTIONS

PFP:00001

Precautions for Battery Service

AKS00B6F

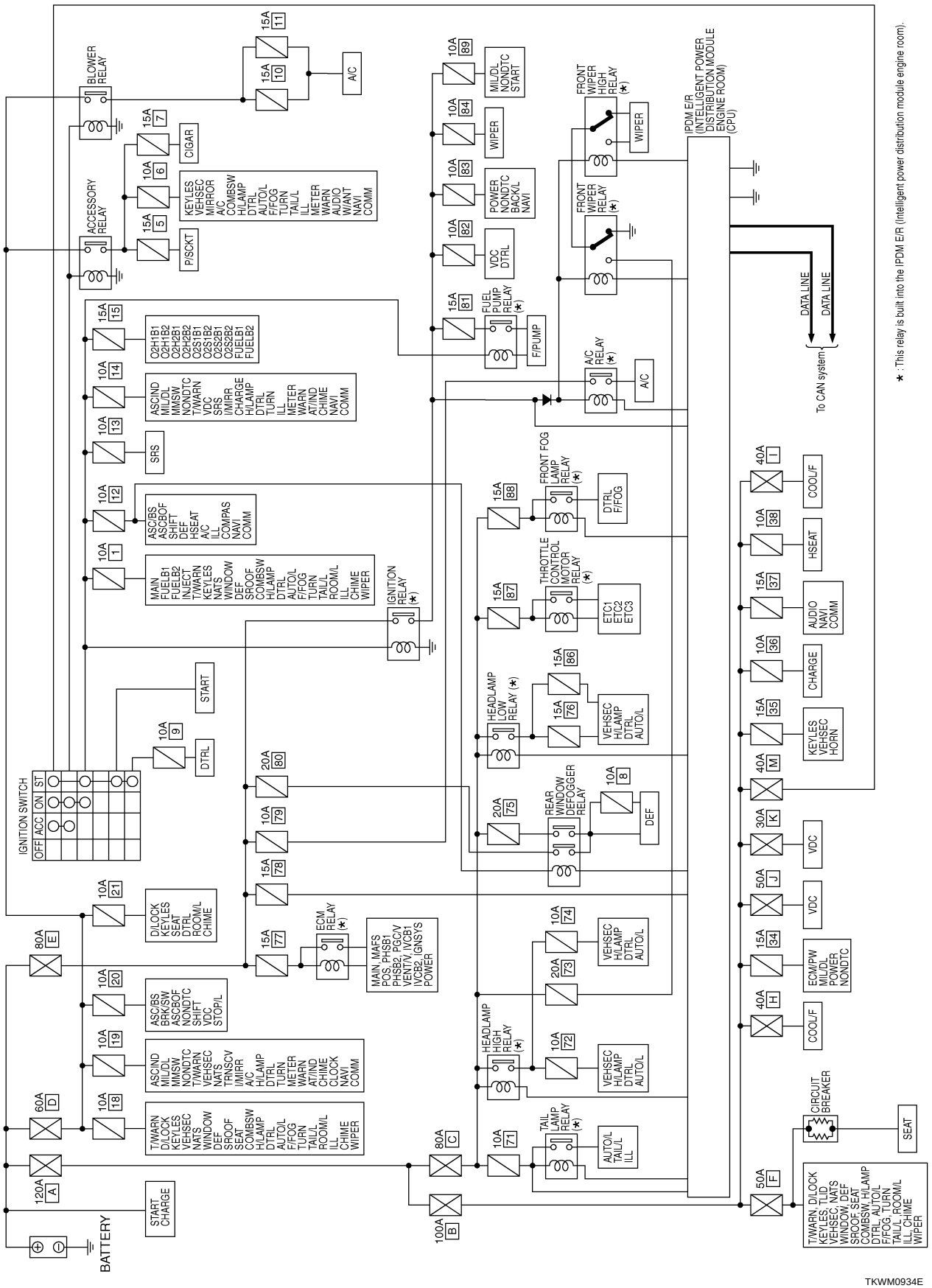
Before disconnecting the battery, lower both the driver and passenger windows. This will prevent any interference between the window edge and the vehicle when the door is opened/closed. During normal operation, the window slightly raises and lowers automatically to prevent any window to vehicle interference. The automatic window function will not work with the battery disconnected.

POWER SUPPLY ROUTING CIRCUIT

PFP:24110

Schematic

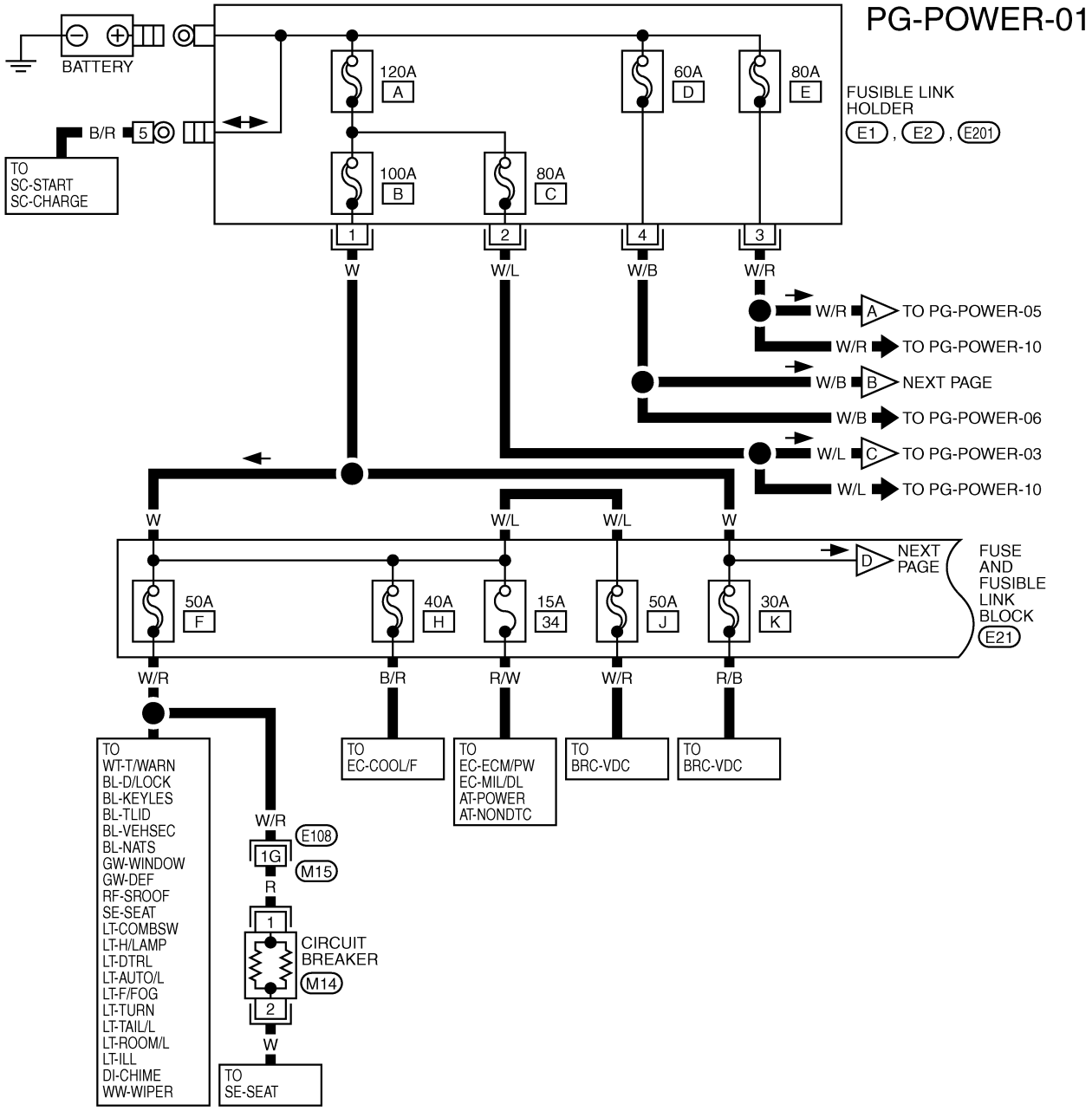
AKS003HW

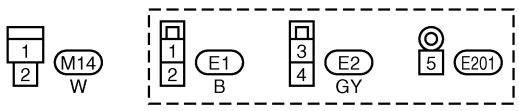


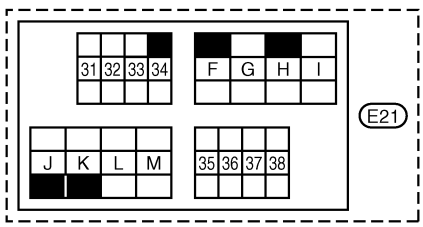
Wiring Diagram — POWER —

AKS003HX

BATTERY POWER SUPPLY — IGNITION SW. IN ANY POSITION



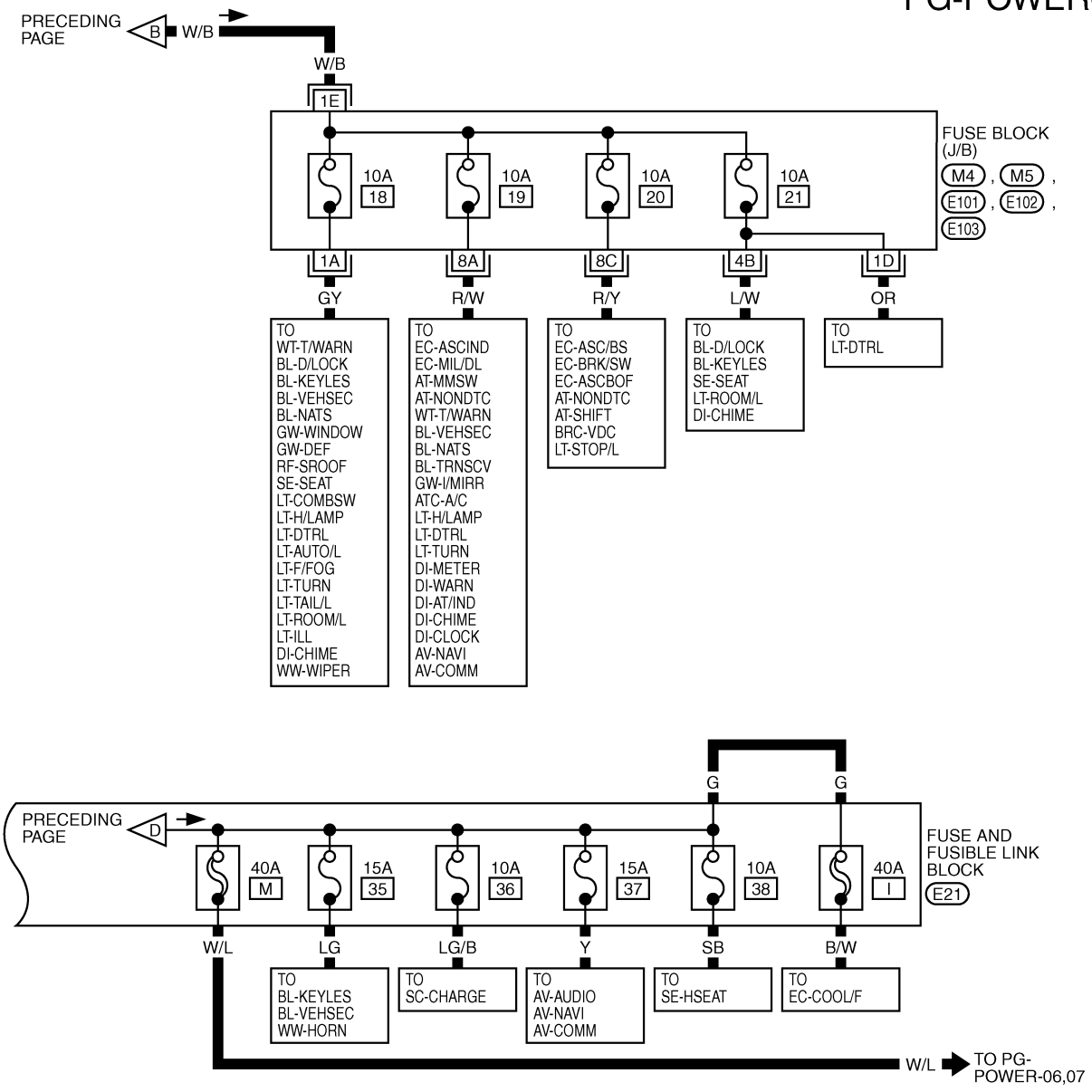


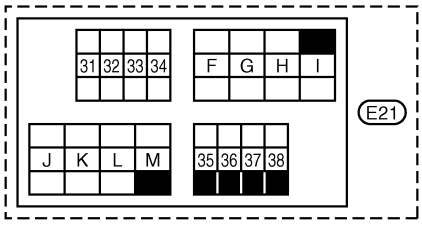


REFER TO THE FOLLOWING.
E108 -SUPER MULTIPLE JUNCTION (SMJ)

TKWM0935E

PG-POWER-02





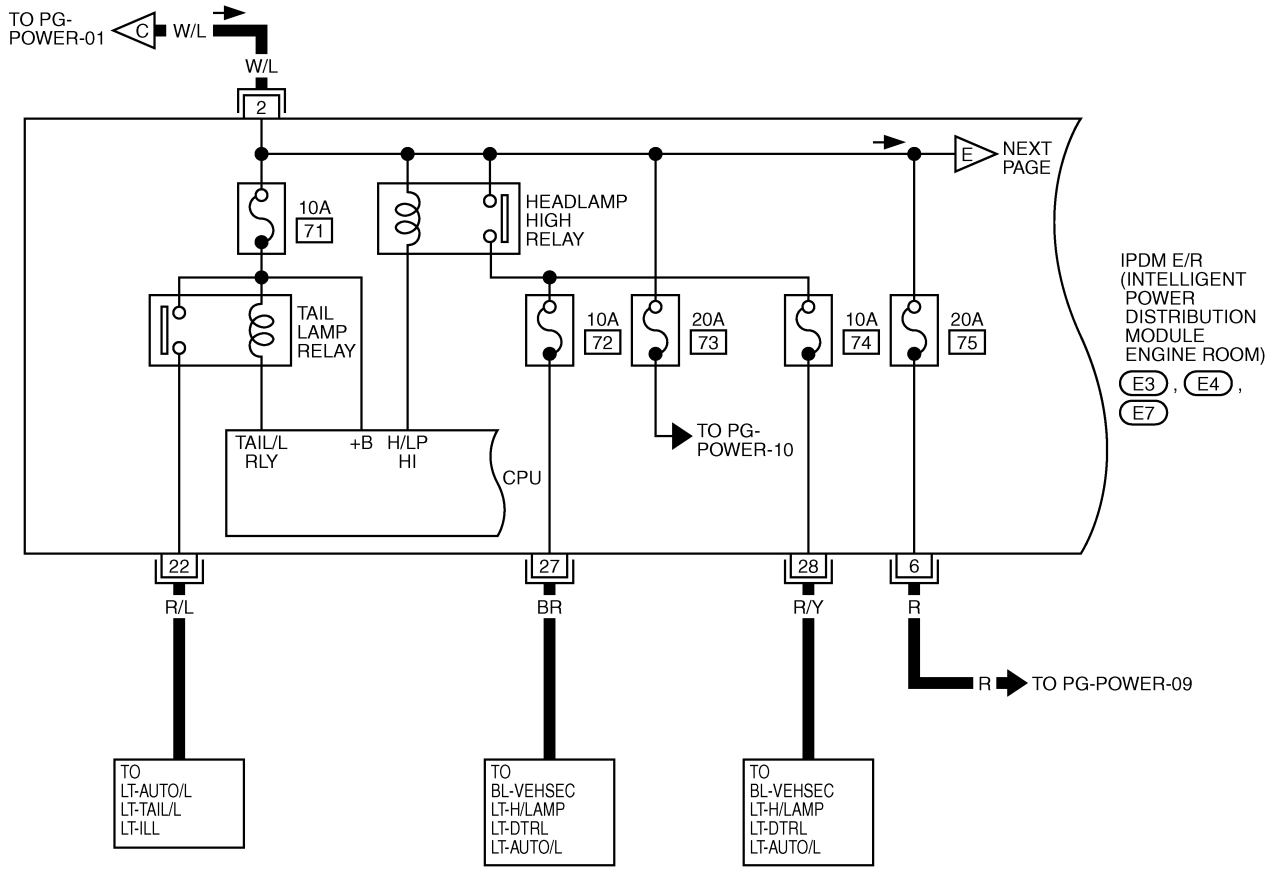
REFER TO THE FOLLOWING.

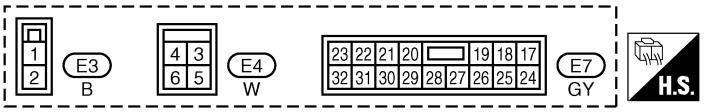
M4 , M5 , E101 , E102 , E103 -FUSE BLOCK-JUNCTION BOX (J/B)

1	2	3	4	5	6	7	8	9	10	11
12	13	14	15	16	17	18	19	20	21	22

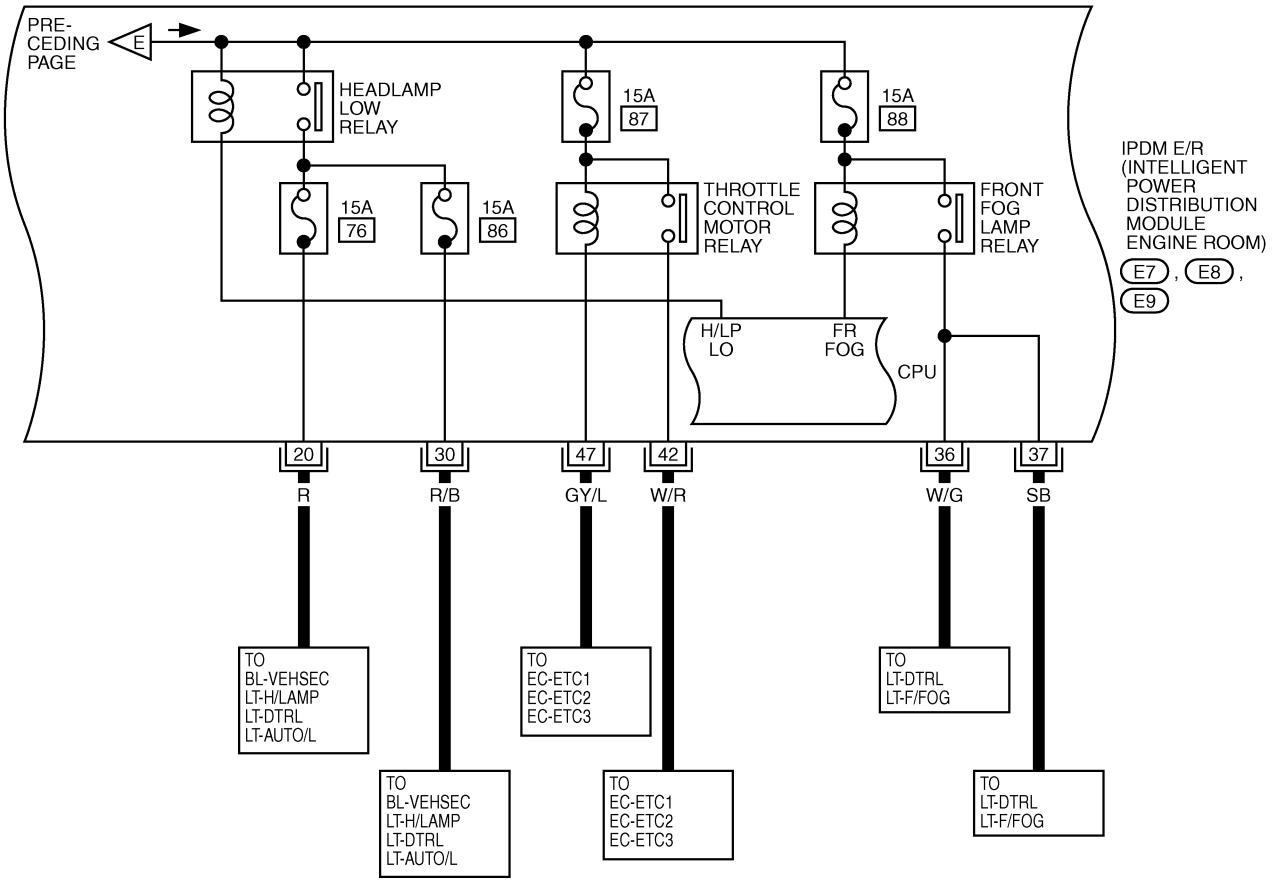
TKWM0936E

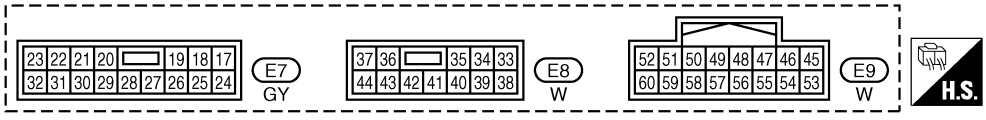
PG-POWER-03





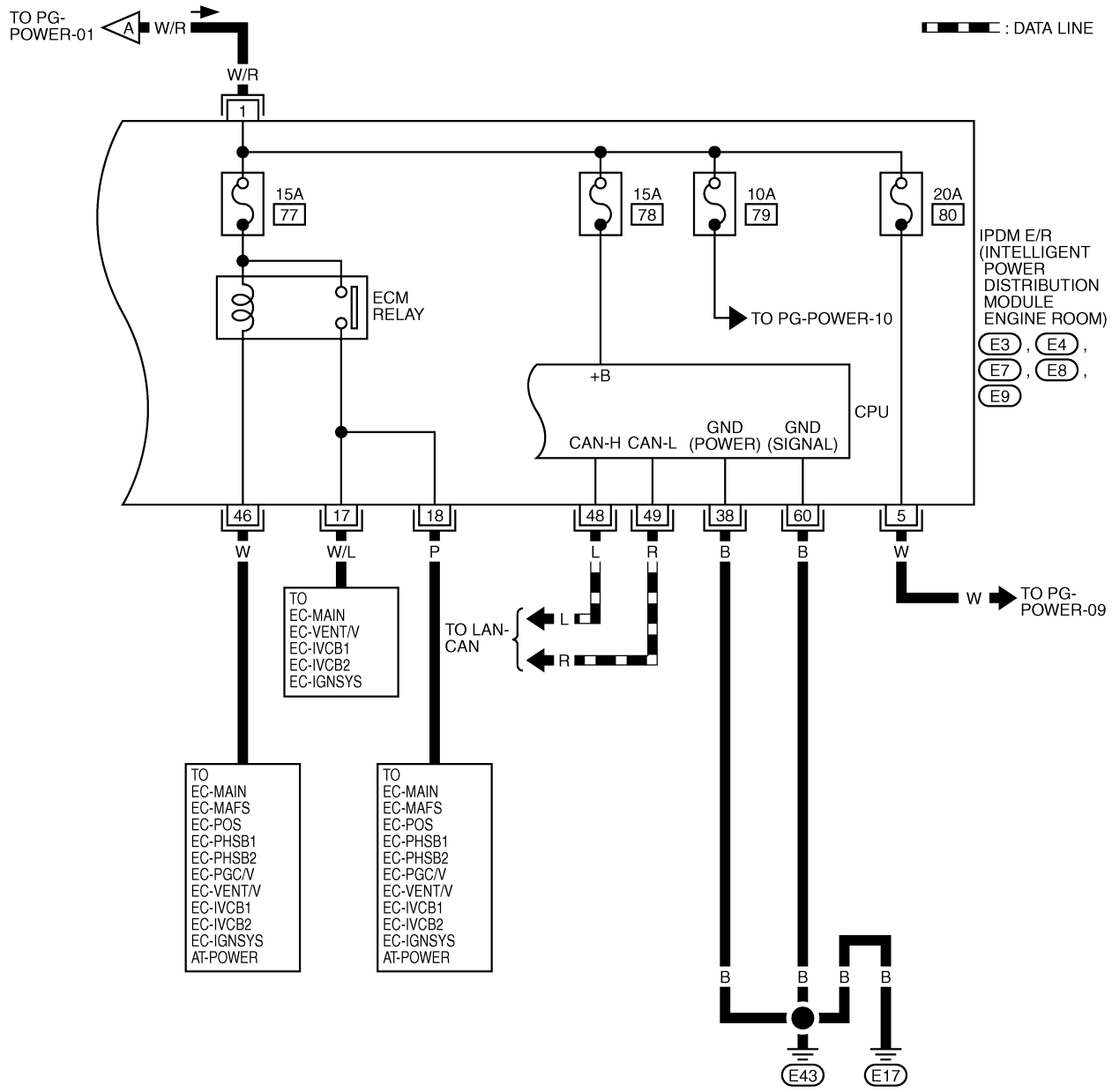
TKWM0937E

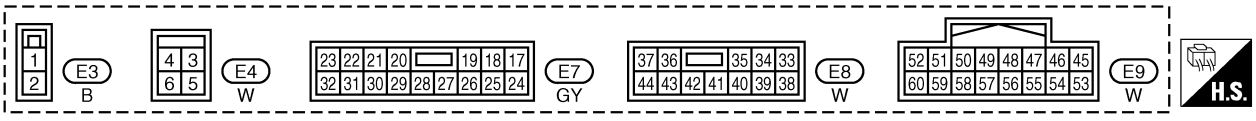

PRE-
CEDING
PAGE
E
HEADLAMP
LOW
RELAY
15A
87
15A
88
15A
76
15A
86
THROTTLE
CONTROL
MOTOR
RELAY
FRONT
FOG
LAMP
RELAY
IPDM E/R
(INTELLIGENT
POWER
DISTRIBUTION
MODULE
ENGINE ROOM)
E7
E8
E9
H/LP
LO
FR
FOG
CPU
20
30
47
42
36
37
R
R/B
GY/L
W/R
W/G
SB
TO
BL-VEHSEC
LT-H/LAMP
LT-DTRL
LT-AUTO/L
TO
BL-VEHSEC
LT-H/LAMP
LT-DTRL
LT-AUTO/L
TO
EC-ETC1
EC-ETC2
EC-ETC3
TO
EC-ETC1
EC-ETC2
EC-ETC3
TO
LT-DTRL
LT-F/FOG
TO
LT-DTRL
LT-F/FOG


23 22 21 20 19 18 17
32 31 30 29 28 27 26 25 24
E7
GY
37 36 35 34 33
44 43 42 41 40 39 38
E8
W
52 51 50 49 48 47 46 45
60 59 58 57 56 55 54 53
E9
W
H.S.

TKWM0938E

PG-POWER-05

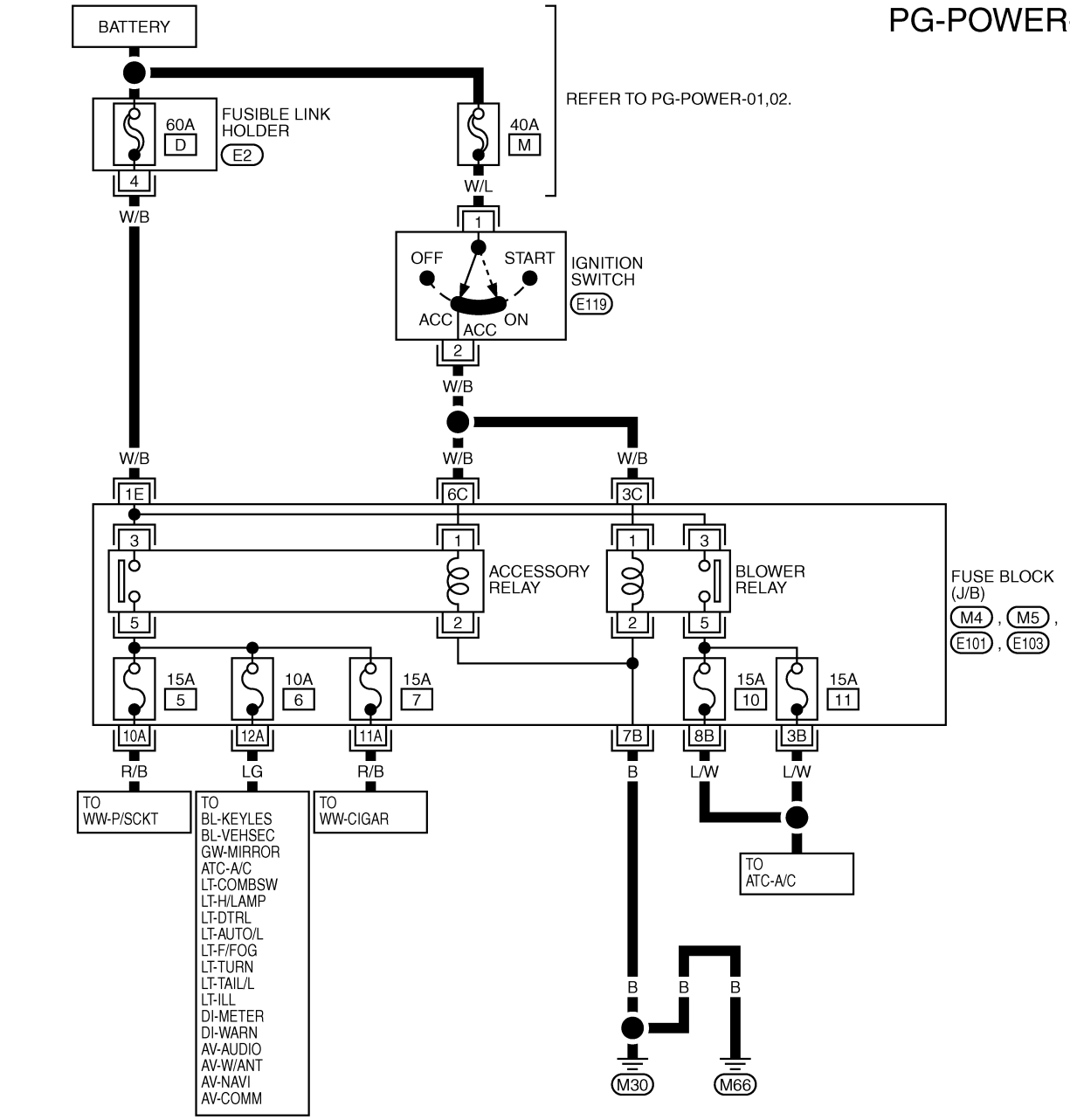


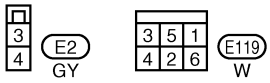


TKWM0939E

ACCESSORY POWER SUPPLY — IGNITION SW. IN “ACC” OR “ON”

PG-POWER-06





REFER TO THE FOLLOWING.

M4 , M5 , E101 , E103

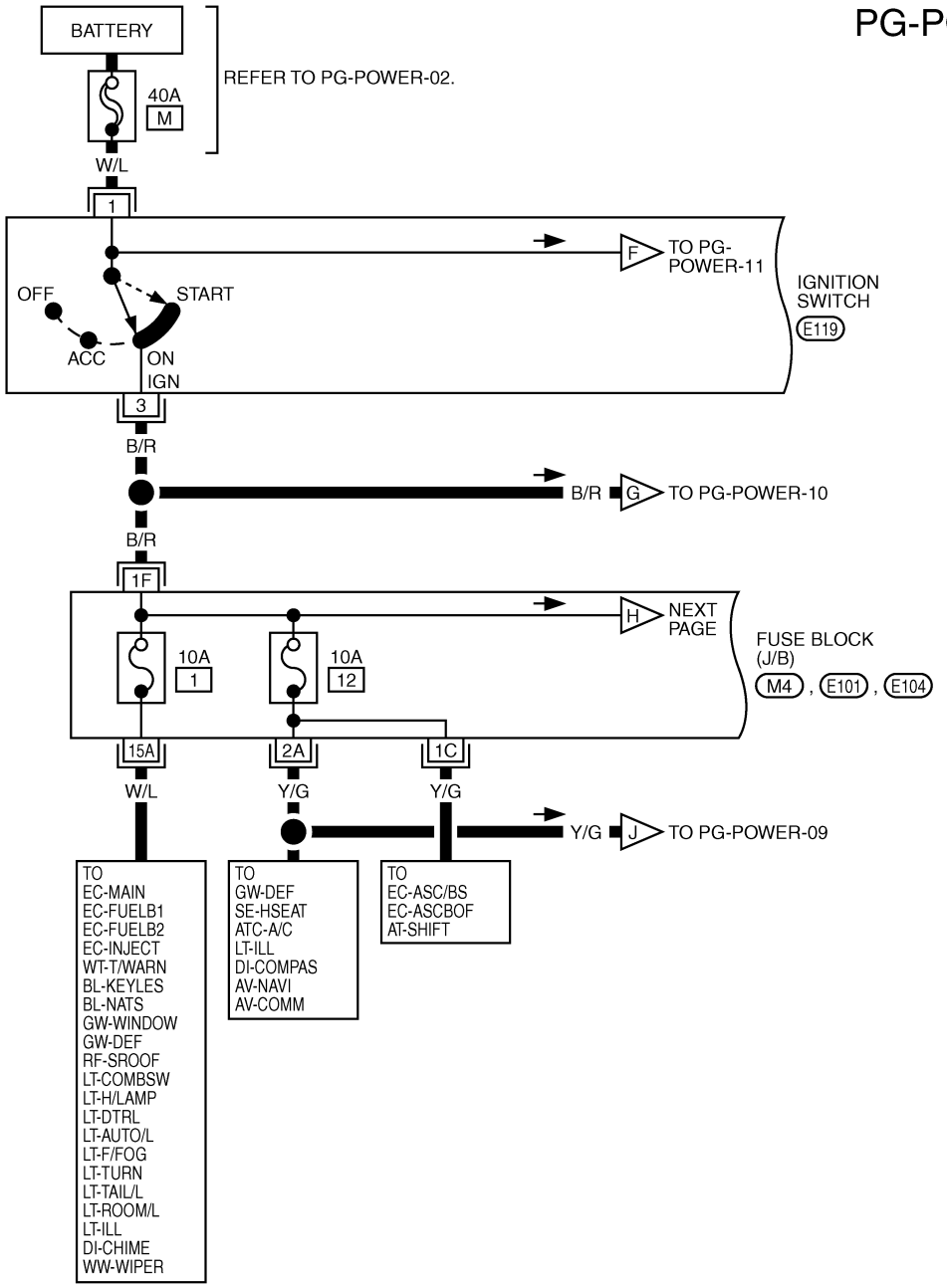
-FUSE BLOCK-JUNCTION BOX (J/B)

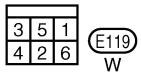
1	2	3	4	5	6	7		8	9	10	11
12	13	14	15	16	17	18	19	20	21	22	

TKWM0941E

IGNITION POWER SUPPLY — IGNITION SW. IN “ON” AND/OR “START”

PG-POWER-07



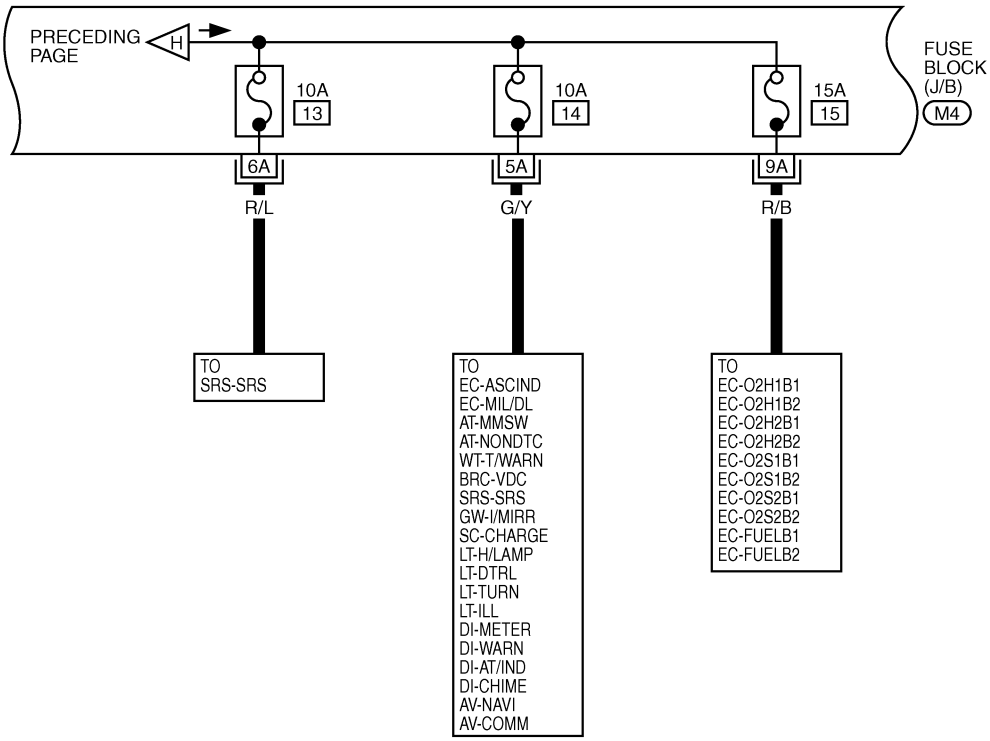


REFER TO THE FOLLOWING.

M4 , E101 , E104 -FUSE BLOCK-JUNCTION BOX (J/B)

1	2	3	4	5	6	7		8	9	10	11
12	13	14	15	16	17	18	19	20	21	22	

TKWM0942E



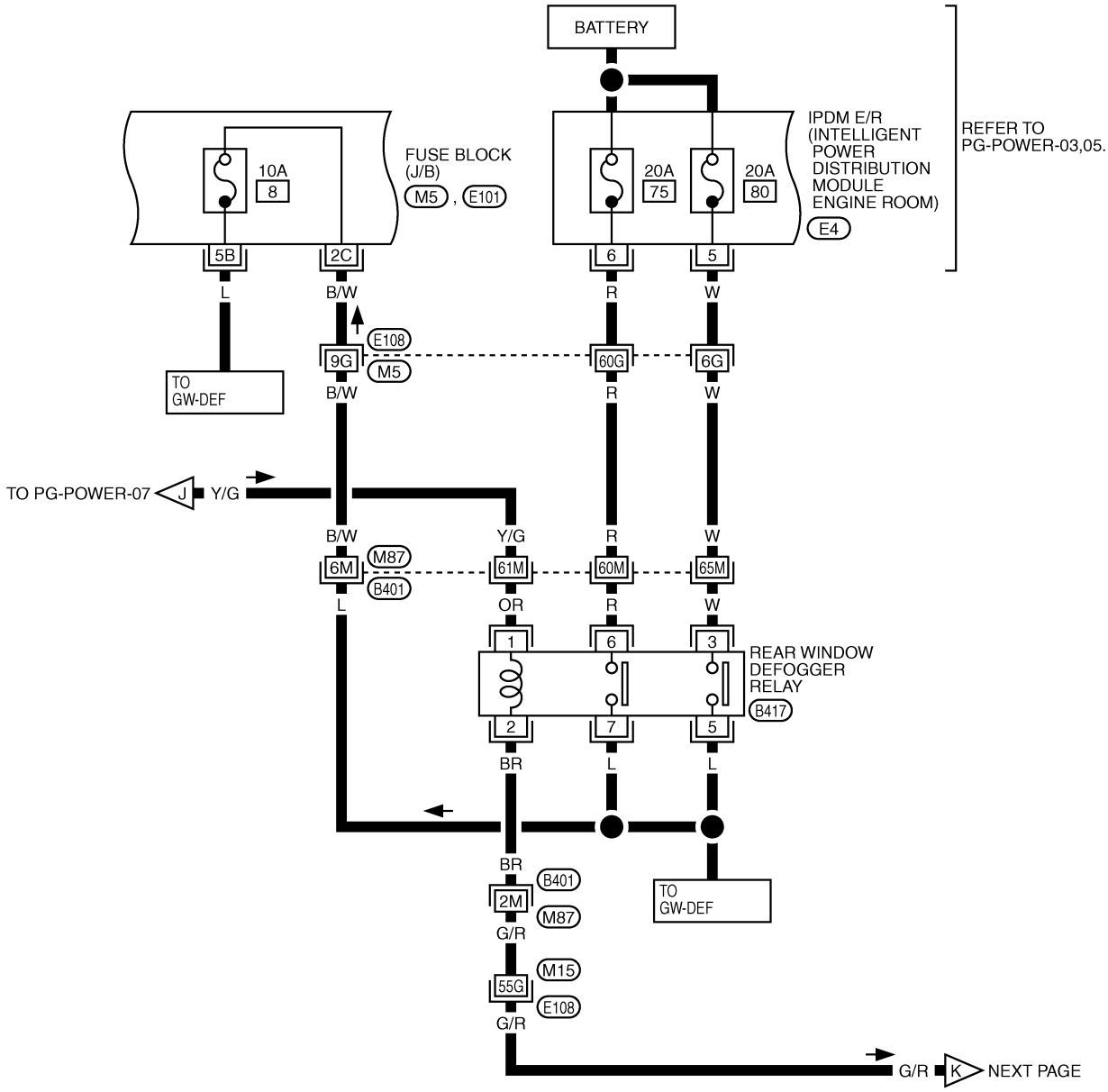
REFER TO THE FOLLOWING.

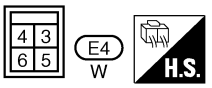
M4 -FUSE BLOCK-JUNCTION BOX (J/B)

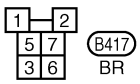
1	2	3	4	5	6	7		8	9	10	11
12	13	14	15	16	17	18	19	20	21	22	

TKWM0943E

PG-POWER-09







REFER TO THE FOLLOWING.

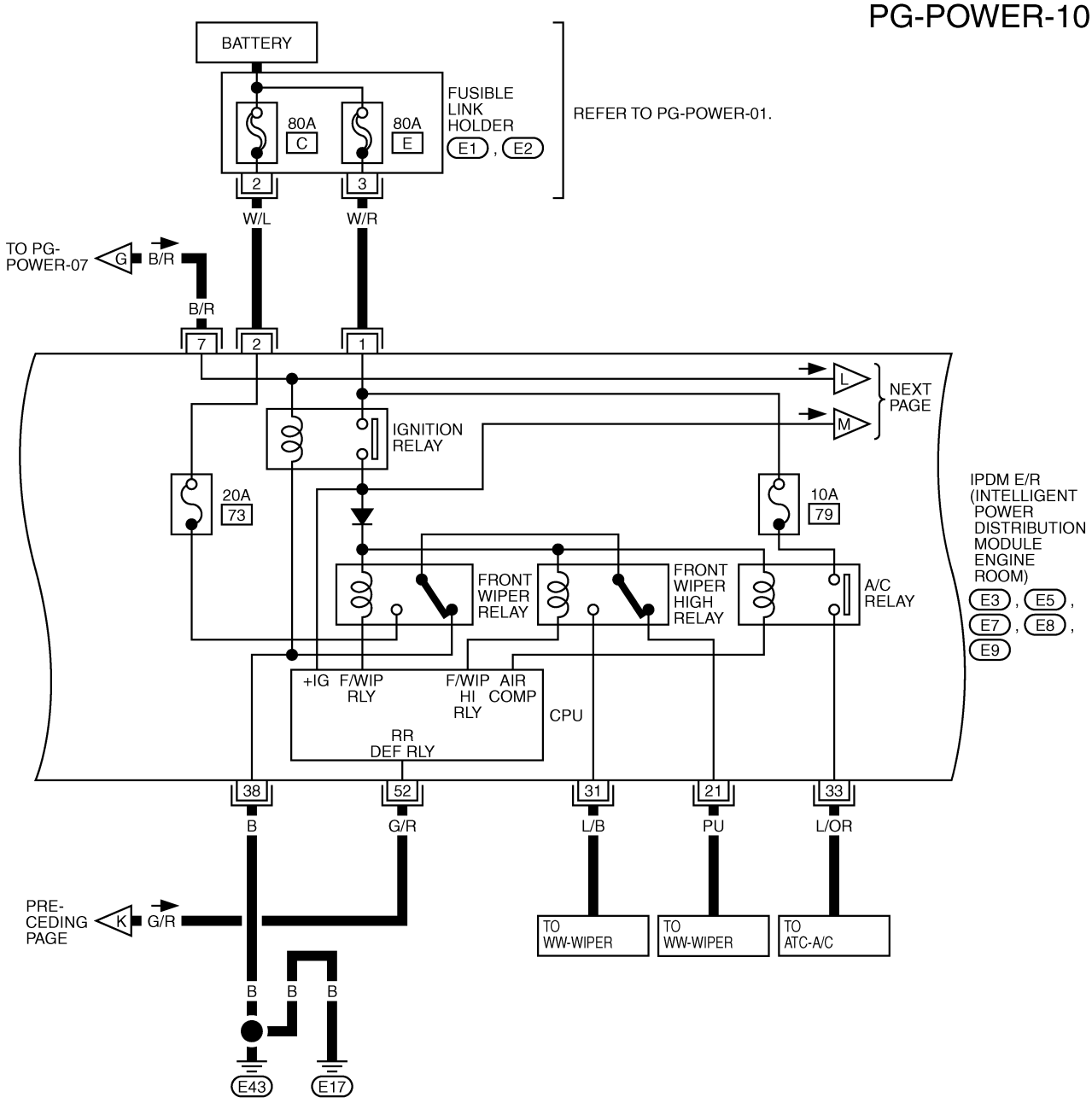
E108 , B401 -SUPER MULTIPLE JUNCTION (SMJ)

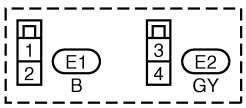
M5 , E101 -FUSE BLOCK-JUNCTION BOX (J/B)

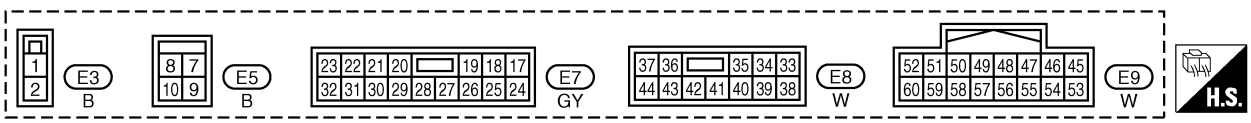
1	2	3	4	5	6	7		8	9	10	11
12	13	14	15	16	17	18	19	20	21	22	

TKWM0944E

PG-POWER-10

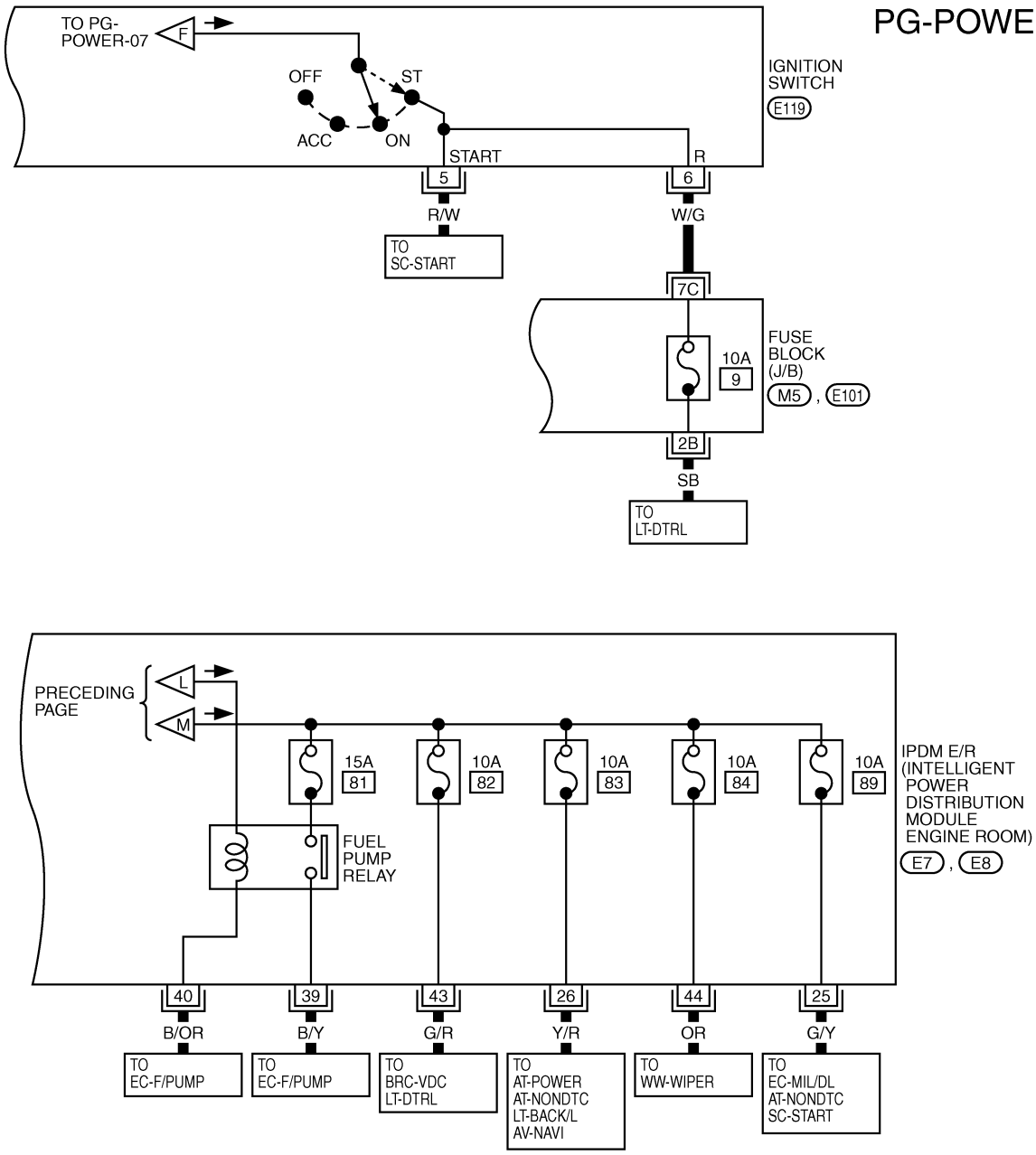


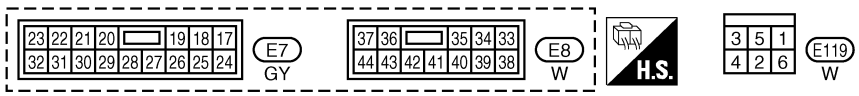


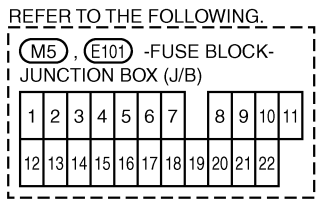


TKWM0945E

PG-POWER-11





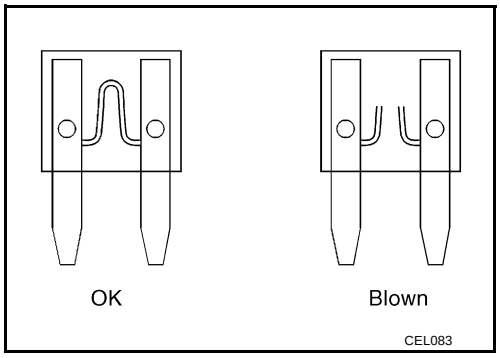


TKWM0946E

Fuse

AKS003HY

- If fuse is blown, be sure to eliminate cause of incident before installing new fuse.
- Use fuse of specified rating. Never use fuse of more than specified rating.
- Do not partially install fuse; always insert it into fuse holder properly.
- Remove fuse for “ELECTRICAL PARTS (BAT)” if vehicle is not used for a long period of time.



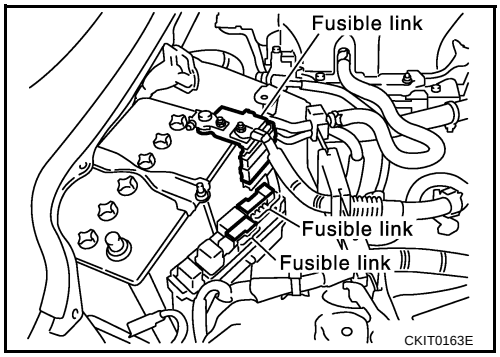
Fusible Link

AKS003HZ

A melted fusible link can be detected either by visual inspection or by feeling with finger tip. If its condition is questionable, use circuit tester or test lamp.

CAUTION:

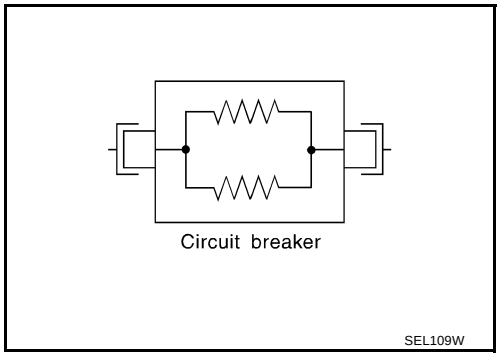
- **If fusible link should melt, it is possible that critical circuit (power supply or large current carrying circuit) is shorted. In such a case, carefully check and eliminate cause of incident.**
- **Never wrap outside of fusible link with vinyl tape. Important: Never let fusible link touch any other wiring harness, vinyl or rubber parts.**



Circuit Breaker

AKS003I0

The PTC thermistor generates heat in response to current flow. The temperature (and resistance) of the thermistor element varies with current flow. Excessive current flow will cause the element's temperature to rise. When the temperature reaches a specified level, the electrical resistance will rise sharply to control the circuit current.
Reduced current flow will cause the element to cool. Resistance falls accordingly and normal circuit current flow is allowed to resume.



IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

PFP:284B7

System Description

AKS00A37

- IPDM E/R (Intelligent Power Distribution Module Engine Room) integrates the relay box and fuse block which were originally placed in engine compartment. It controls integrated relay via IPDM E/R control circuit.
- IPDM E/R-integrated control circuit performs ON-OFF operation of relay, CAN communication control, oil pressure switch signal reception, etc.
- It controls operation of each electrical part via ECM, BCM and CAN communication lines.

CAUTION:
None of the IPDM E/R-integrated relays can be removed.

SYSTEMS CONTROLLED BY IPDM E/R

1. Lamp control
   Using CAN communication line, it receives signal from BCM and controls the following lamps:
   - Head lamps (Hi, Lo)
   - Parking lamps
   - Tail lamps
   - Front fog lamps
2. Wiper control
   Using CAN communication line, it receives signals from BCM and controls the front wipers.
3. Rear window defogger relay control
   Using CAN communication line, it receives signals from BCM and controls the rear window defogger relay.
4. A/C compressor control
   Using CAN communication line, it receives signals from ECM and controls the A/C relay.
5. Cooling fan control
   Using CAN communication line, it receives signals from ECM and controls cooling fan relay.
6. Horn control
   Using CAN communication line, it receives signals from BCM and controls horn relay.

CAN COMMUNICATION LINE CONTROL

With CAN communication, by connecting each control unit using two communication lines (CAN L-line, CAN H-line), it is possible to transmit maximum amount of information with minimum wiring. Each control unit can transmit and receive data, and reads necessary information only.

1. Fail-safe control
   - When CAN communication with other control units is impossible, IPDM E/R performs fail-safe control. After CAN communication recovers normally, it also returns to normal control.
   - Operation of control parts by IPDM E/R during fail-safe mode is as follows:

Controlled system	Fail-safe mode
Headlamp	● With the ignition switch ON, the headlamp (low) is ON. ● With the ignition switch OFF, the headlamp (low) is OFF.
Tail and parking lamps	● With the ignition switch ON, the tail and parking lamps is ON. ● With the ignition switch OFF, the tail and parking lamps is OFF.
Cooling fan	● With the ignition switch ON, the cooling fan HI operates. ● With the ignition switch OFF, the cooling fan stops.
Front wiper	Until the ignition switch is turned off, the front wiper LO and HI remains in the same status it was in just before fail–safe control was initiated.
Rear window defogger	Rear window defogger relay OFF
A/C compressor	A/C compressor OFF
Front fog lamps	Front fog lamp relay OFF

IPDM E/R STATUS CONTROL

In order to save power, IPDM E/R switches status by itself based on each operating condition.

1. CAN communication status
   - CAN communication is normally performed with other control units.
   - Individual unit control by IPDM E/R is normally performed.
   - When sleep request signal is received from BCM, mode is switched to sleep waiting status.
2. Sleep waiting status
   - Process to stop CAN communication is activated.
   - All systems controlled by IPDM E/R are stopped. When 1 seconds have elapsed after CAN communication with other control units is stopped, mode switches to sleep status.
3. Sleep status
   - IPDM E/R operates in low current-consumption mode.
   - CAN communication is stopped.
   - When a change in CAN communication line is detected, mode switches to CAN communication status.
   - When a change hood switch or ignition switch signal is detected, mode switches to CAN communication status.

CAN Communication System Description

AKS00A38

CAN (Controller Area Network) is a serial communication line for real time application. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Modern vehicles are equipped with many electronic control units and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN H line, CAN L line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.

CAN Communication Unit

AKS00A39

Refer to LAN-4, "CAN Communication Unit" .

Function of Detecting Ignition Relay Malfunction

AKS00A3A

- When contact point of integrated ignition relay is stuck and cannot be turned OFF, IPDM E/R turns ON tail and parking lamps for 10 minutes to indicate IPDM E/R malfunction.
- When a state of ignition relay having built-in does not agree with a state of Ignition switch signal input by a CAN communication from BCM, IPDM E/R lets tail lamp relay operate.

Ignition switch signal	Ignition relay status	Tail lamp relay
ON	ON	—
OFF	OFF	—
ON	OFF	—
OFF	ON	ON (10 minutes)

NOTE:
When the ignition switch is turned ON, the tail lamp is OFF.

CONSULT-II

AKS00A3B

CONSULT-II performs the following functions with combination of data receiving, command and transmission using the CAN communication line from the IPDM E/R.

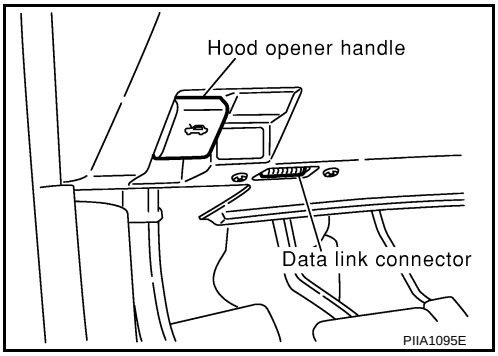
Inspection Item, Diagnosis Mode	Description
SELF-DIAG RESULTS	The IPDM E/R performs diagnosis of the CAN communication and self-diagnosis.
DATA MONITOR	The input/output data of the IPDM E/R is displayed in real time.
CAN DIAG SUPPORT MNTR	The result of transmit/receive diagnosis of CAN communication can be read.
ACTIVE TEST	The IPDM E/R sends a drive signal to electronic components to check their operation.

CONSULT-II BASIC OPERATION

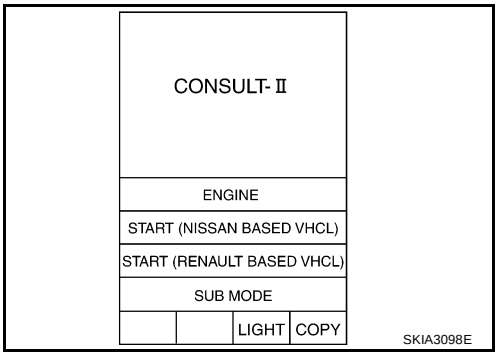
CAUTION:

If CONSULT-II is used with no connection of CONSULT-II CONVERTER, malfunctions might be detected in self-diagnosis depending on control unit which carry out CAN communication.

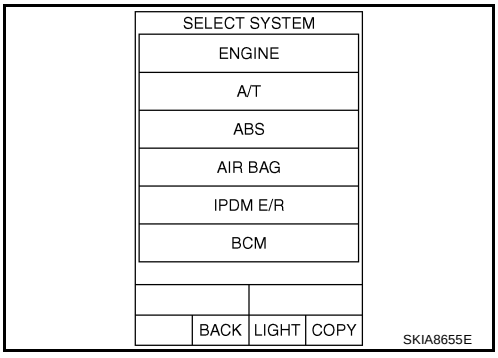
1. With the ignition switch OFF, connect CONSULT-II and CONSULT-II CONVERTER to the data link connector, then turn the ignition switch ON.



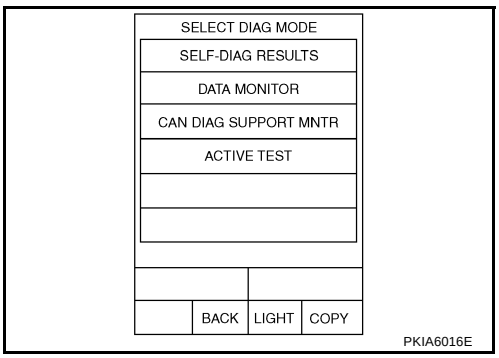
2. Touch “START (NISSAN BASED VHCL)”.



3. Touch “IPDM E/R” on “SELECT SYSTEM” screen.
   - If “IPDM E/R” is not displayed, print “SELECT SYSTEM” screen, then refer to GI-39, "CONSULT-II Data Link Connector (DLC) Circuit" .



4. Select the desired part to be diagnosed on the “SELECT DIAG MODE” screen.



SELF-DIAG RESULTS

Operation Procedure

1. Touch “SELF-DIAG RESULTS” on “SELECT DIAG MODE” screen.
2. Check display content in self-diagnostic results.

Display Item List

Display Items	CONSULT-II display code	Malfunction detecting condition	TIME		Possible causes
			CRNT	PAST	
NO DTC IS DETECTED.FURTHER TESTING MAY BE REQUIRED.	-	-	-	-	-
CAN COMM CIRC	U1000	● If CAN communication reception/transmission data has a malfunction, or if any of the control units malfunction, data reception/ transmission cannot be confirmed. ● When the data in CAN communication is not received before the specified time	×	×	Any of or several items below have errors. ● TRANSMIT DIAG ● ECM ● BCM/SEC

NOTE:
The details for display of the period are as follows:

- CRNT: Error currently detected with IPDM E/R.
- PAST: Error detected in the past and memorized with IPDM E/R.

DATA MONITOR

Operation Procedure

1. Touch “DATA MONITOR” on “SELECT MONITOR ITEM ” screen.
2. Touch “ALL SIGNALS”, “MAIN SIGNALS” or “SELECTION FROM MENU” on the “DATA MONITOR” screen.

ALL SIGNALS	All items will be monitored.
MAIN SIGNALS	Monitor the predetermined item.
SELECT FROM MENU	Select any item for monitoring.

3. Touch “START”.
4. Touch the required monitoring item on “SELECTION FROM MENU”. In “ALL SIGNALS”, all items are monitored. In “MAIN SIGNALS”, predetermined items are monitored.
5. Touch “RECORD” while monitoring to record the status of the item being monitored. To stop recording, touch “STOP”.

All Signals, Main Signals, Selection From Menu

Item name	CONSULT-II screen display	Display or unit	Monitor item selection			Description
			ALL SIGNALS	MAIN SIGNALS	SELECTION FROM MENU	
Motor fan request	MOTOR FAN REQ	1/2/3/4	×	×	×	Signal status input from ECM
Compressor request	AC COMP REQ	ON/OFF	×	×	×	Signal status input from ECM
Tail & clear request	TAIL&CLR REQ	ON/OFF	×	×	×	Signal status input from BCM
H/L LO request	HL LO REQ	ON/OFF	×	×	×	Signal status input from BCM
H/L HI request	HL HI REQ	ON/OFF	×	×	×	Signal status input from BCM
FR fog request	FR FOG REQ	ON/OFF	×	×	×	Signal status input from BCM
H/L washer request	HL WASHER REQ[NOTE]	OFF	×		×	—
FR wiper request	FR WIP REQ	STOP/1LOW/ LOW/HI	×	×	×	Signal status input from BCM
Wiper auto stop	WIP AUTO STOP	ACT P/STOP P	×	×	×	Output status of IPDM E/R
Wiper protection	WIP PROT	OFF/Block	×	×	×	Control status of IPDM E/R
Starter request	ST RLY REQ	ON/OFF	×		×	Status of input signal [NOTE]
Ignition relay status	IGN RLY	ON/OFF	×	×	×	Ignition relay status monitored with IPDM E/R
Rear window defogger request	RR DEF REQ	ON/OFF	×	×	×	Signal status input from BCM
Oil pressure switch	OIL P SW	OPEN/CLOSE	×		×	Signal status input in IPDM E/R
DTLR request	DTRL REQ[NOTE]	ON/OFF	×		×	—
Hood switch	HOOD SW	ON/OFF	×		×	Input signal status
Theft warning horn request	THFT HRN REQ	ON/OFF	×		×	Signal status input from BCM
Horn chirp	HORN CHIRP	ON/OFF	×		×	Output status of IPDM E/R

NOTE:

- Perform monitoring of IPDM E/R data with the ignition switch ON. When the ignition switch is at ACC, the display may not be correct.
- This item is displayed, but cannot monitor it.

ACTIVE TEST

Operation Procedure

1. Touch “ACTIVE TEST” on “SELECT DIAG MODE” screen.
2. Touch item to be tested, and check operation.

3. Touch “START”.
4. Touch “STOP” while testing to stop the operation.

Test item	CONSULT-II screen display	Description
Tail lamp output	TAIL LAMP	With a certain ON-OFF operation, the tail lamp relay can be operated.
Rear window defogger output	REAR DEFOGGER	With a certain ON-OFF operation, the rear window defogger relay can be operated.
Front wiper (HI, LO) output	FRONT WIPER	With a certain operation (OFF, HI ON, LO ON), the front wiper relay (Lo, Hi) can be operated.
Cooling fan output	MOTOR FAN	With a certain operation (1,2,3,4), the cooling fan can be operated.
Headlamp washer output	HEAD LANP WASHER[NOTE]	—
Lamp (HI, LO, FOG) output	LAMPS	With a certain operation (OFF, HI ON, LO ON, FOG ON), the lamp relay (Lo, Hi, Fog) can be operated.
Horn output	HORN	Push "ON" button, horn relay operates 20ms.

NOTE:
This items are displayed, but they cannot be tested.

Auto Active Test

AKS00A3C

DESCRIPTION

- In auto active test mode, operation inspection can be performed when IPDM E/R sends a drive signal to the following systems:
  - Rear window defogger
  - Front wipers
  - Tail and parking lamps
  - Front fog lamps
  - Headlamps (Hi, Lo)
  - A/C compressor (magnetic clutch)
  - Cooling fan

OPERATION PROCEDURE

1. Close hood front door RH and lift wiper arms away from windshield (to prevent glass damage by wiper operation).

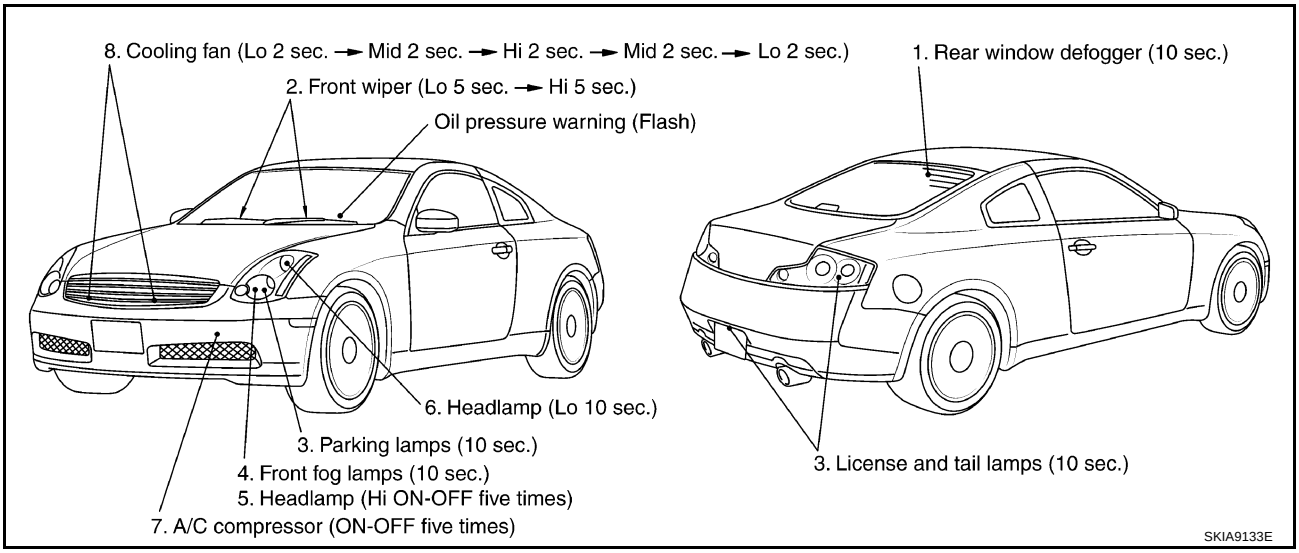
   NOTE:
   When auto active test is performed with hood opened, sprinkle water on windshield beforehand.
2. Turn ignition switch OFF.
3. Turn ignition switch ON and, within 20 seconds, press front door switch LH 10 times. Then turn ignition switch OFF.
4. Turn ignition switch ON within 10 seconds after ignition switch OFF.
5. When auto active test mode is actuated, horn chirps once.
6. After a series of operations is repeated three times, auto active test is completed.

   NOTE:
   When auto active test mode has to be cancelled halfway, turn ignition switch OFF.

   CAUTION:
   Be sure to inspect BL-33, "Check Door Switch (With Navigation System)" or BL-35, "Check Door Switch (Without Navigation System)" when the auto active test cannot be performed.

INSPECTION IN AUTO ACTIVE TEST MODE

- When auto active test mode is actuated, the following eight steps are repeated three times.



Concept of Auto Active Test

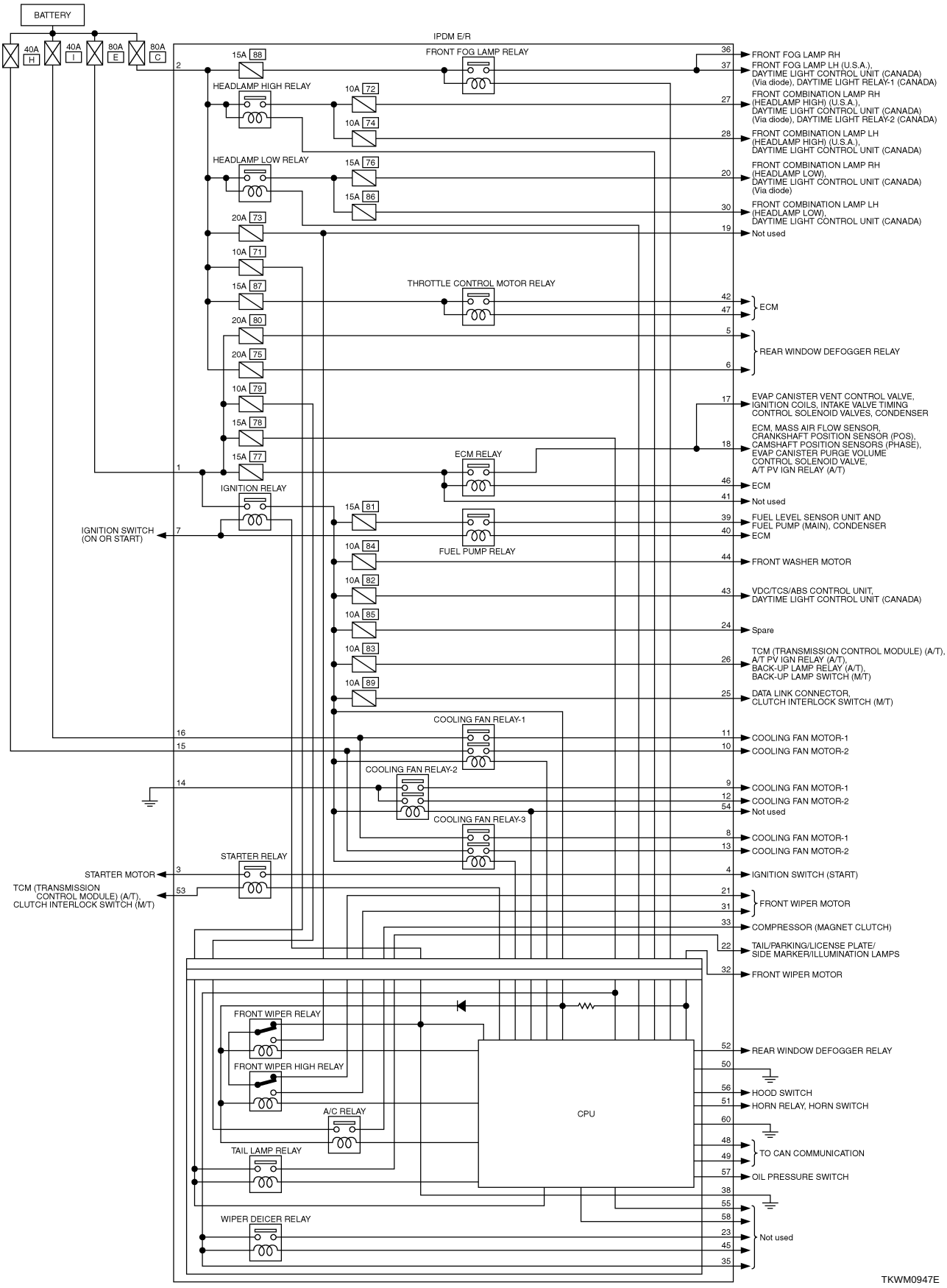
- IPDM E/R actuates auto active test mode when it receives door switch signal from BCM via CAN communication line. Therefore, when auto active test mode is activated successfully, CAN communication between IPDM E/R and BCM is normal.
- If any of systems controlled by IPDM E/R cannot be operated, possible cause can be easily diagnosed using auto active test.

Diagnosis chart in auto active test mode

Symptom	Inspection contents		Possible cause
Rear window defogger does not operate.	Perform auto active test. Does rear window defogger operate?	YES	● BCM signal input circuit
		NO	● Rear window defogger relay ● Harness/connector malfunction between IPDM E/R and rear window defogger ● Open circuit of rear window defogger ● IPDM E/R malfunction
Any of front wipers, tail and parking lamps, front fog lamps, and head lamps (Hi, Lo) do not operate.	Perform auto active test. Does system in question operate?	YES	● BCM signal input system
		NO	● Lamp/wiper motor malfunction ● Lamp/wiper motor ground circuit malfunction ● Harness/connector malfunction between IPDM E/R and system in question ● IPDM E/R (integrated relay) malfunction
A/C compressor does not operate.	Perform auto active test. Does magnetic clutch operate?	YES	● BCM signal input circuit ● CAN communication signal between BCM and ECM. ● CAN communication signal between ECM and IPDM E/R
		NO	● Magnetic clutch malfunction ● Harness/connector malfunction between IPDM E/R and magnetic clutch ● IPDM E/R (integrated relay) malfunction
Cooling fan does not operate.	Perform auto active test. Does cooling fan operate?	YES	● ECM signal input circuit ● CAN communication signal between ECM and IPDM E/R
		NO	● Cooling fan motor malfunction ● Harness/connector malfunction between IPDM E/R and cooling fan motor ● IPDM E/R (integrated relay) malfunction
Oil pressure warning lamp does not operate.	Perform auto active test. Does oil pressure warning lamp blink?	YES	● Harness/connector malfunction between IPDM E/R and oil pressure switch ● Oil pressure switch malfunction ● IPDM E/R malfunction
		NO	● CAN communication signal between IPDM E/R and combination meter ● Combination meter

Schematic

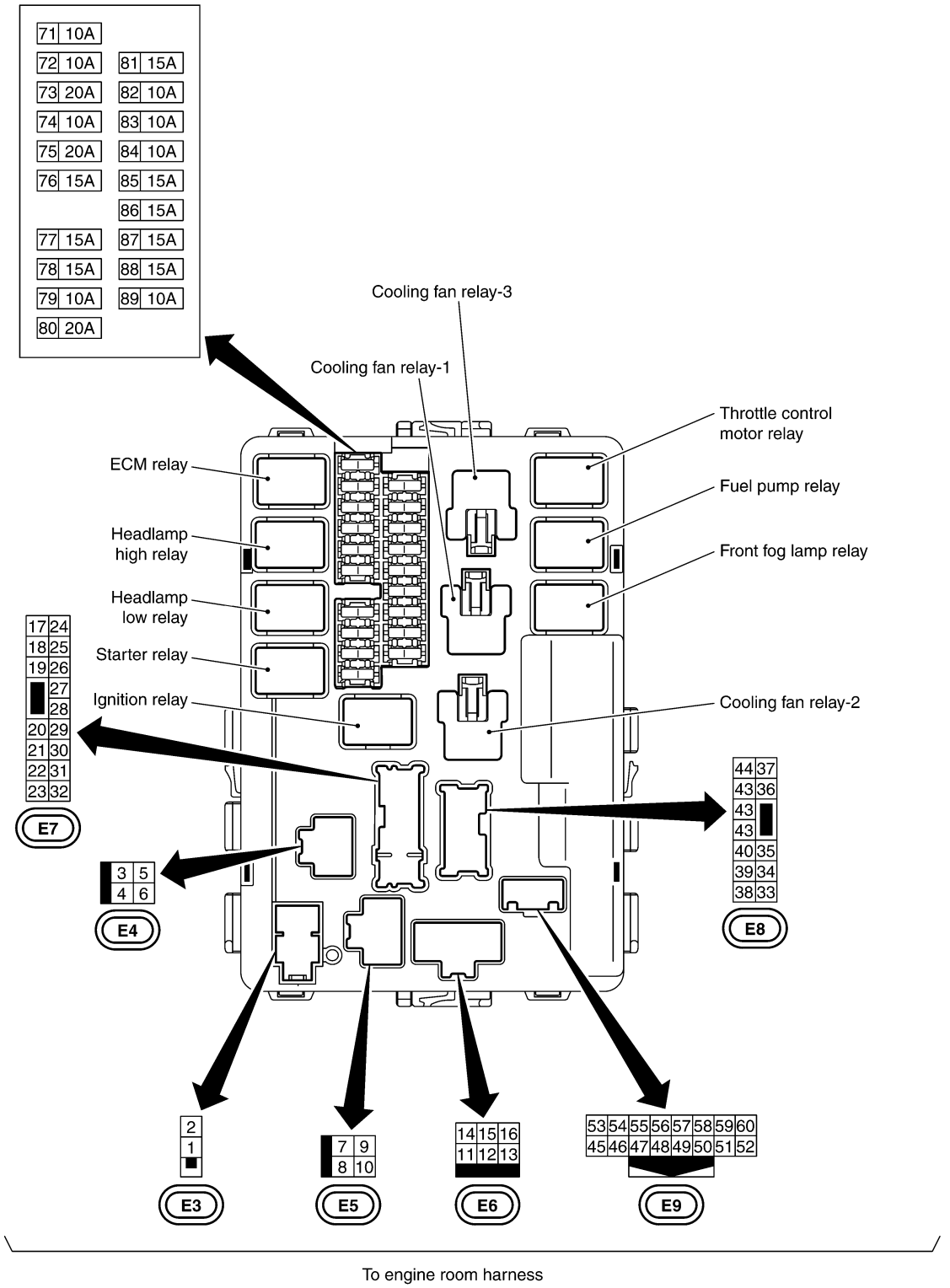
AKS00A3D



TKWM0947E

IPDM E/R Terminal Arrangement

AKS00A3E



IPDM E/R Power/Ground Circuit Inspection

AKS00A3G

1. CHECK FUSE AND FUSIBLE LINK

- Make sure the following fusible links or IPDM E/R fuses are not blown.

Terminal No.	Signal name	Fuse, fusible link No.
1, 2	Battery power	F/L–C, F/L–E, Fuse No. 71,78

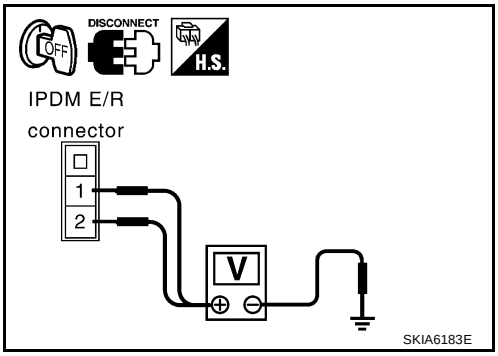
OK or NG

OK >> GO TO 2.
NG >> Replace fuse or fusible link.

2. CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect IPDM E/R harness connector E3.
3. Check voltage between IPDM E/R harness connector E3 terminals 1 (W/R), 2 (W/L) and ground.

1 (W/R), 2 (W/L) – Ground : Battery voltage should exist



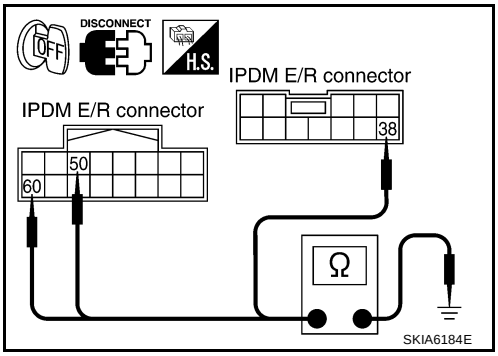
OK or NG

OK >> GO TO 3.
NG >> Replace IPDM E/R power supply circuit harness.

3. CHECK GROUND CIRCUIT

1. Disconnect IPDM E/R harness connectors E8 and E9.
2. Check continuity between IPDM E/R harness connectors E8 terminal 38 (B), E9 terminal 50 (B), 60 (B) and ground.

38 (B), 50 (B), 60 (B) – Ground : Continuity should exist



OK or NG

OK >> INSPECTION END
NG >> Replace ground circuit harness of IPDM E/R.

Inspection With CONSULT-II (Self-Diagnosis)

AKS00A3H

CAUTION:

If CONSULT-II is used with no connection of CONSULT-II CONVERTER, malfunctions might be detected in self-diagnosis depending on control unit which carry out CAN communication.

1. CHECK SELF DIAGNOSTIC RESULT

1. Connect CONSULT-II and select “IPDM E/R” on the Diagnosis System Selection screen.
2. Select “SELF-DIAG RESULTS” on the “SELECT DIAG MODE” screen.
3. Check display content in self diagnostic results.

CONSULT-II display	CONSULT-II display code	TIME		Details of diagnosis result
		CRNT	PAST	
NO DTC IS DETECTED. FURTHER TESTING MAY BE REQUIRED.	-	-	-	No malfunction
CAN COMM CIRC	U1000	×	×	Any of or several items below have errors. ● TRANSMIT DIAG ● ECM ● BCM/SEC

NOTE:

The Details for Display of the Period Are as Follows:

- CRNT: Error currently detected with IPDM E/R.
- PAST: Error detected in the past and memorized with IPDM E/R.

Contents displayed

NO DTC IS DETECTED.FURTHER TESTING MAY BE REQUIRED.>>INSPECTION END

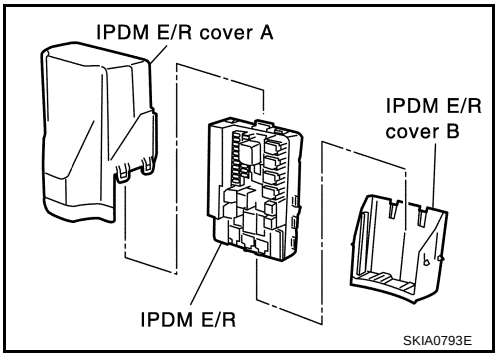
CAN COMM CIRC>>After print-out of the monitor items, refer to LAN-2, "Precautions When Using CONSULT-II" .

Removal and Installation of IPDM E/R

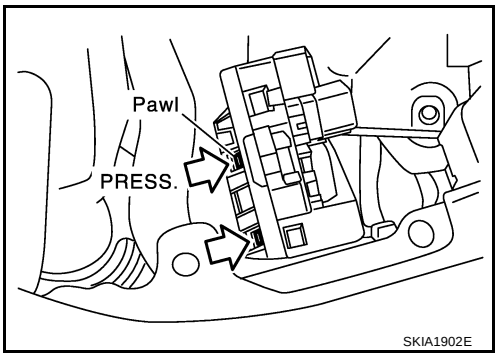
AKS00A3I

REMOVAL

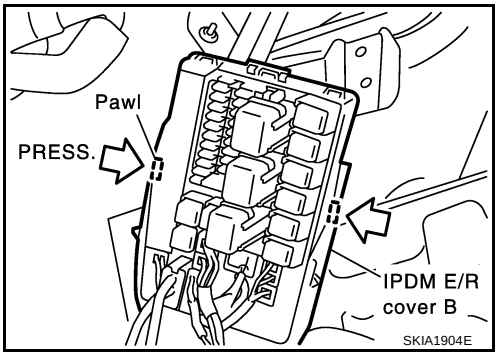
1. Remove battery. Refer to SC-9, "Removal and Installation" in “Starting and Charging System (SC)” section.



2. Remove IPDM E/R cover A. While pushing pawl on backside of IPDM E/R cover B toward vehicle front to unlock, lift up IPDM E/R.



3. While pushing tabs on right and left side of IPDM E/R, remove IPDM E/R cover B from IPDM E/R.
4. Remove harness connector from IPDM E/R.



INSTALLATION

Install in the reverse order of removal.

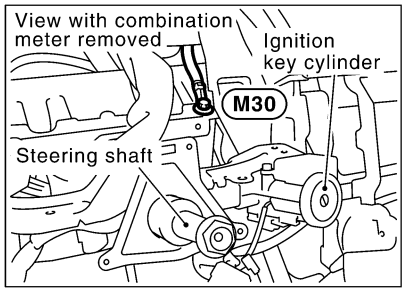
GROUND

PFP:00011

Ground Distribution

AKS003IA

MAIN HARNESS



CON-NECTOR NUMBER	CONNECT TO
M2	BCM (Body control module)
M5	Fuse block (J/B) (Terminal No.7B) • Accessory relay • Blower relay
M7	Illumination control switch
M8	Data link connector (Terminal No. 4)
M9	VDC off switch
M20	Combination meter (Terminal No. 45)
M20	Combination meter (Terminal No. 46)
M20	Combination meter (Terminal No. 47)
M22	Steering angle sensor
M28	Door mirror remote control switch
M29	Combination switch
M33	Clock
M37	NAVI switch
M38	A/C and audio controller
M44	Cigarette lighter socket
M47	A/T device (Terminal No. 1) • Shift lock solenoid • Park position switch
M47	A/T device (Terminal No. 9) • Mode select switch
M49	Ashtray illumination
M50	Hazard switch
M53	Heated seat switch (Passenger side) (With A/T)
M54	Heated seat switch (Driver side) (With A/T)
M55	Air bag diagnosis sensor unit
M81	Compass
M84	Trunk lid opener switch
M85	Heated seat relay
M154	Heated seat switch (Driver side) (With M/T)
M155	Heated seat switch (Passenger side) (With M/T)

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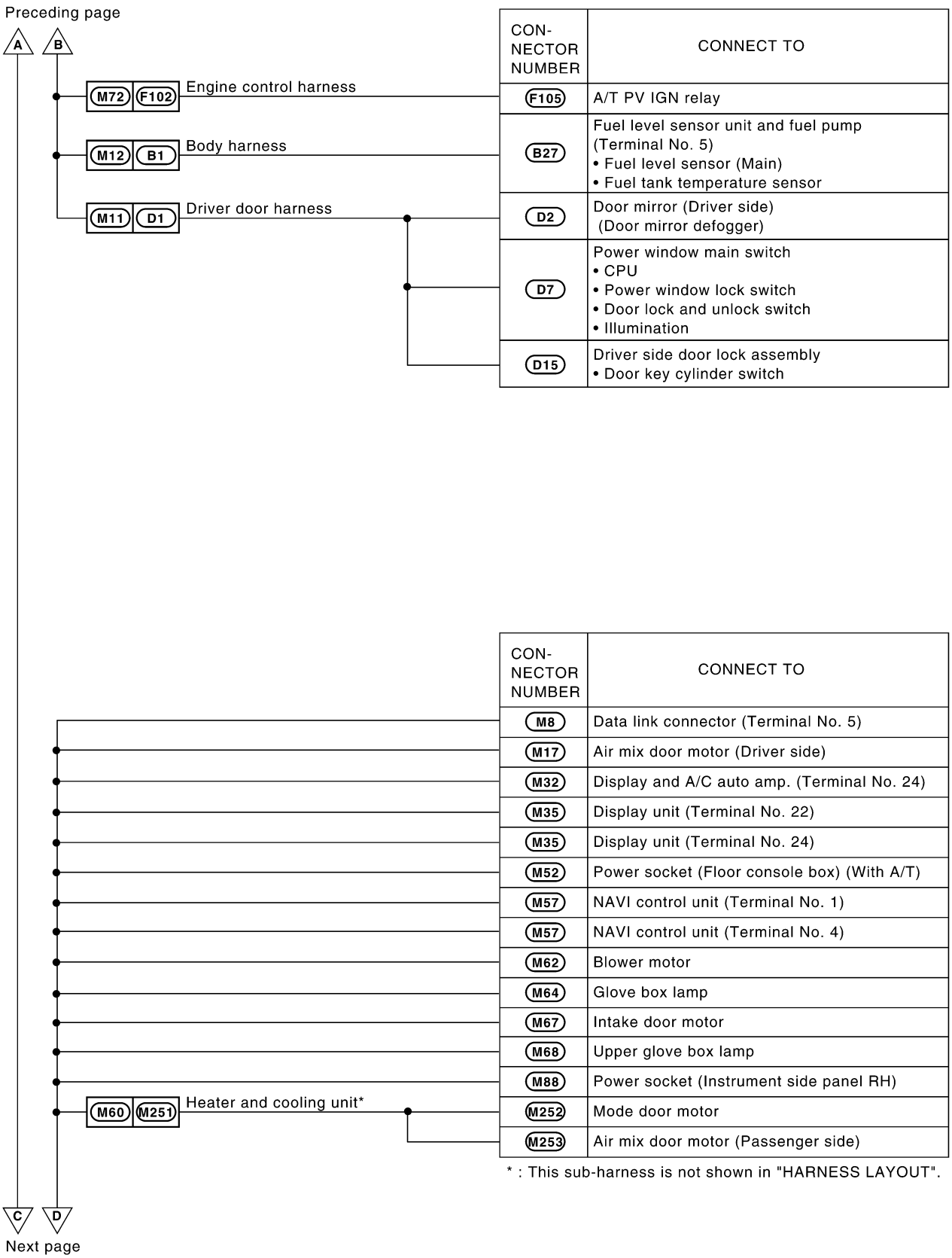

CON-NECTOR NUMBER	CONNECT TO
F105	A/T PV IGN relay
B27	Fuel level sensor unit and fuel pump (Terminal No. 5) • Fuel level sensor (Main) • Fuel tank temperature sensor
D2	Door mirror (Driver side) (Door mirror defogger)
D7	Power window main switch • CPU • Power window lock switch • Door lock and unlock switch • Illumination
D15	Driver side door lock assembly • Door key cylinder switch

CON-NECTOR NUMBER	CONNECT TO
M8	Data link connector (Terminal No. 5)
M17	Air mix door motor (Driver side)
M32	Display and A/C auto amp. (Terminal No. 24)
M35	Display unit (Terminal No. 22)
M35	Display unit (Terminal No. 24)
M52	Power socket (Floor console box) (With A/T)
M57	NAVI control unit (Terminal No. 1)
M57	NAVI control unit (Terminal No. 4)
M62	Blower motor
M64	Glove box lamp
M67	Intake door motor
M68	Upper glove box lamp
M88	Power socket (Instrument side panel RH)
M252	Mode door motor
M253	Air mix door motor (Passenger side)

* : This sub-harness is not shown in "HARNESS LAYOUT".

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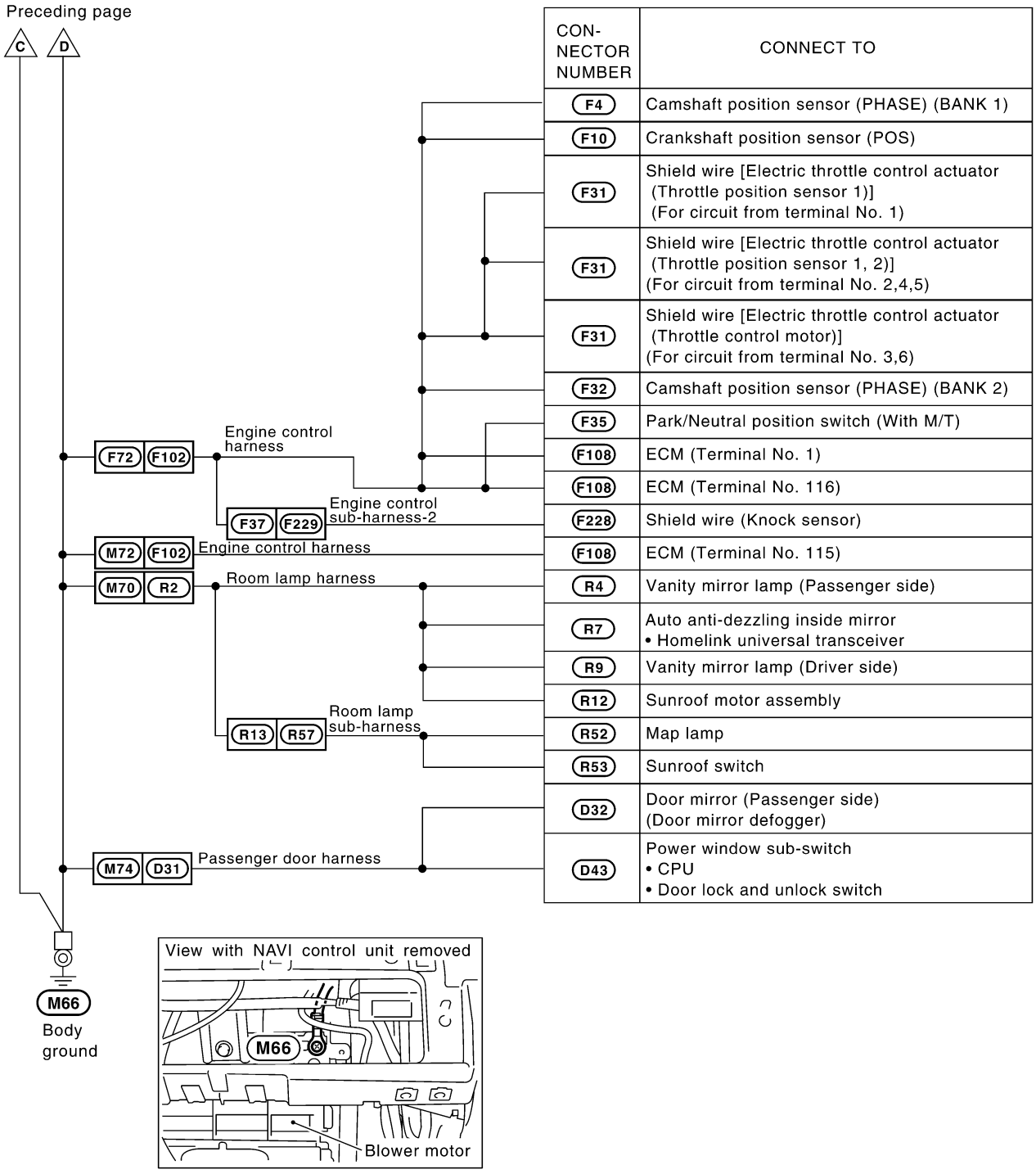
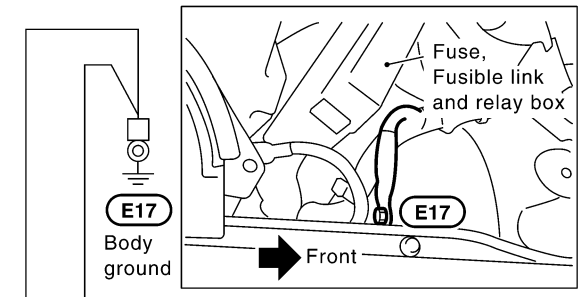


CON-NECTOR NUMBER	CONNECT TO
F4	Camshaft position sensor (PHASE) (BANK 1)
F10	Crankshaft position sensor (POS)
F31	Shield wire [Electric throttle control actuator (Throttle position sensor 1)] (For circuit from terminal No. 1)
F31	Shield wire [Electric throttle control actuator (Throttle position sensor 1, 2)] (For circuit from terminal No. 2,4,5)
F31	Shield wire [Electric throttle control actuator (Throttle control motor)] (For circuit from terminal No. 3,6)
F32	Camshaft position sensor (PHASE) (BANK 2)
F35	Park/Neutral position switch (With M/T)
F108	ECM (Terminal No. 1)
F108	ECM (Terminal No. 116)
F228	Shield wire (Knock sensor)
F108	ECM (Terminal No. 115)
R4	Vanity mirror lamp (Passenger side)
R7	Auto anti-dezzling inside mirror • Homelink universal transceiver
R9	Vanity mirror lamp (Driver side)
R12	Sunroof motor assembly
R52	Map lamp
R53	Sunroof switch
D32	Door mirror (Passenger side) (Door mirror defogger)
D43	Power window sub-switch • CPU • Door lock and unlock switch

CKIM0259E

ENGINE ROOM HARNESS



CON-NECTOR NUMBER	CONNECT TO
E6	IPDM E/R (Intelligent power distribution module engine room) (Terminal No. 14)
E14	Daytime light relay-1
E16	Daytime light relay-2
E23	Hood switch
E24	Front combination lamp RH (Terminal No. 4) • Headlamp (Low) • Turn signal/Parking • Parking
E26	Daytime light control unit
E28	Front side marker lamp RH
E30	Washer level sensor
E41	Front combination lamp LH (Terminal No. 8) (For U.S.A.) • Headlamp (High) • Fog

E108 M15 Main harness

CON-NECTOR NUMBER	CONNECT TO
M31	Display and A/C auto amp. (Terminal No. 14)
E8	IPDM E/R (Intelligent power distribution module engine room) (Terminal No. 38)
E9	IPDM E/R (Intelligent power distribution module engine room) (Terminal No. 50)
E9	IPDM E/R (Intelligent power distribution module engine room) (Terminal No.60)
E24	Front combination lamp RH (Terminal No. 8) • Headlamp (High) • Fog
E33	Horn (Low)
E36	Horn (High)
E39	Cooling fan motor-1
E40	Front side marker lamp LH

E F
Next page

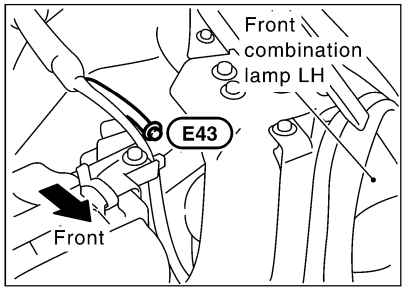
CKIM0288E

Preceding page

E F

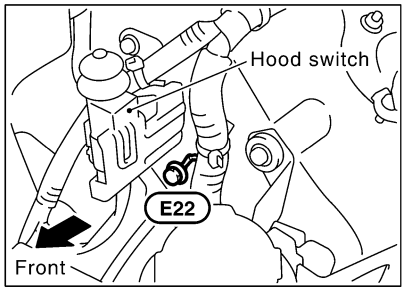
CON-NECTOR NUMBER	CONNECT TO
E41	Front combination lamp LH (Terminal No. 4) • Headlamp (Low) • Turn signal/Parking • Parking
E44	Brake fluid level switch
E52	Front wiper motor
E53	Cooling fan motor-2
E118	VDC/TCS/ABS control unit (Terminal No. 28)
E118	VDC/TCS/ABS control unit (Terminal No. 29)

E43
Body ground



CON-NECTOR NUMBER	CONNECT TO
E37	Shield wire (Crash zone sensor)

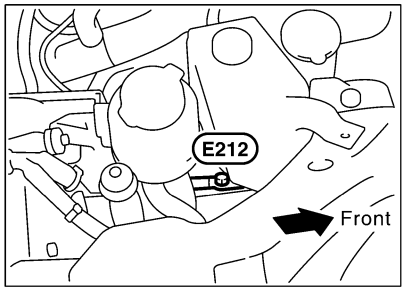
E22
Body ground

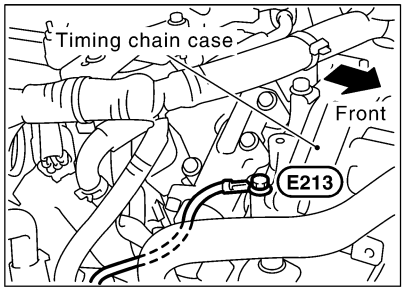


CON-NECTOR NUMBER	CONNECT TO
E211	Alternator (E)

E212
Body ground

E213
Engine ground





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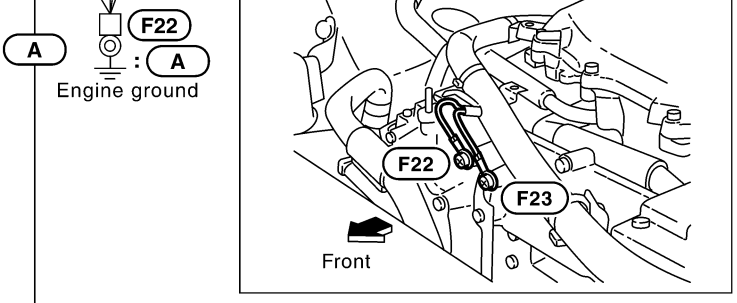
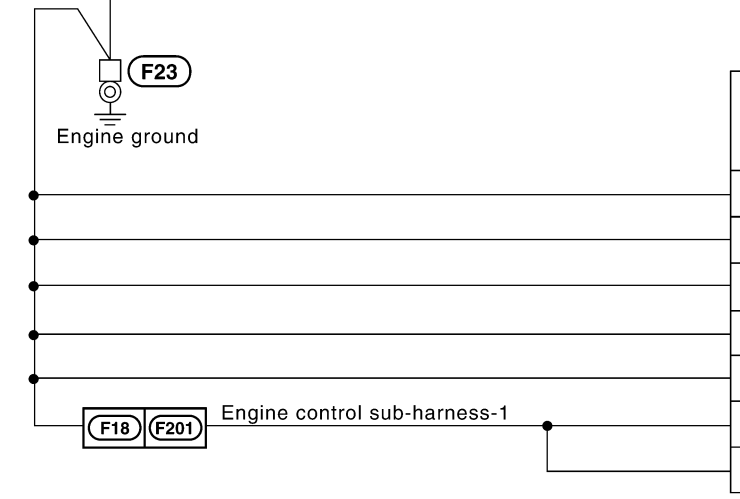
ENGINE CONTROL HARNESS

CON-NECTOR NUMBER	CONNECT TO
F103	TCM (Transmission control module) (Terminal No. 5)
F103	TCM (Transmission control module) (Terminal No. 14)
F103	TCM (Transmission control module) (Terminal No. 24)
F104	TCM (Transmission control module) (Terminal No. 46)
F103	Shield wire [TCM (Transmission control module)] (For circuit from terminal No. 5)



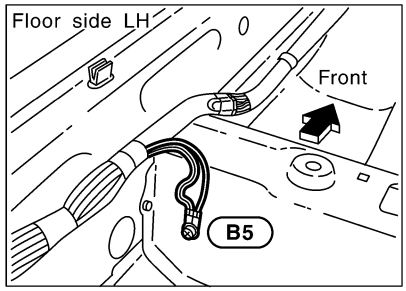


CON-NECTOR NUMBER	CONNECT TO
F15	Ignition coil No. 5 (With power transistor)
F27	Ignition coil No. 2 (With power transistor)
F28	Ignition coil No. 4 (With power transistor)
F29	Ignition coil No. 6 (With power transistor)
F38	Condenser
F202	Ignition coil No. 3 (With power transistor)
F203	Ignition coil No. 1 (With power transistor)

A : With A/T

CKIT0250E

BODY HARNESS



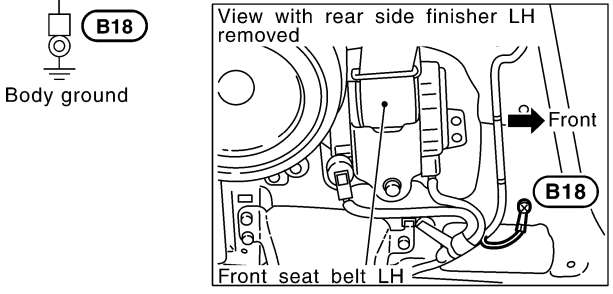
CON-NECTOR NUMBER	CONNECT TO
B324	Driver side seat control unit
B326	Power seat switch (Sliding switch) (Driver side)
B332	Front seat cushion heater (Driver side)
B8	Seat belt buckle switch (Driver side)

CON-NECTOR NUMBER	CONNECT TO
B152	Licence plate lamp LH
B153	Licence plate lamp RH
B125	Rear combination lamp LH • Tail and stop • Turn signal • Back-up • Side marker
B127	Rear combination lamp RH • Tail and stop • Turn signal • Back-up • Side marker

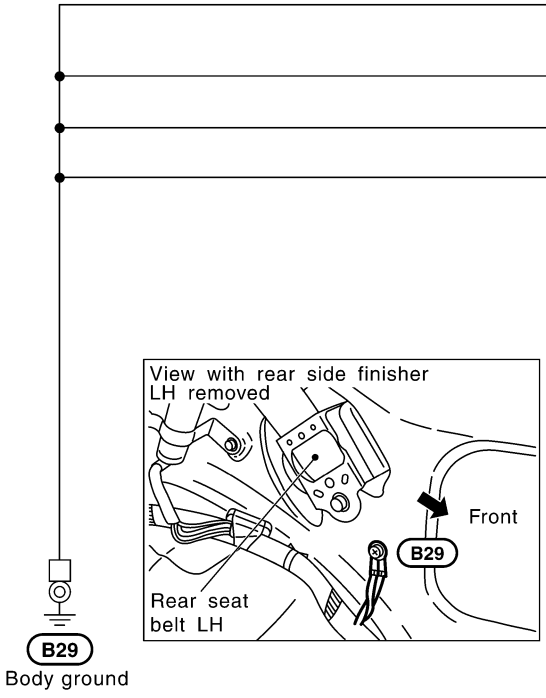
*:This sub-harness is not shown in “HARNESS LAYOUT”.

CKIM0262E

CON-NECTOR NUMBER	CONNECT TO
B15	Shield wire [LH side air bag (Satellite) sensor]



CON-NECTOR NUMBER	CONNECT TO
B27	Fuel level sensor unit and fuel pump (Terminal No. 3) • Fuel pump
B42	Condenser
B116	High-mounted stop lamp (On the rear parcel shelf)
B123	BOSE speaker amp.



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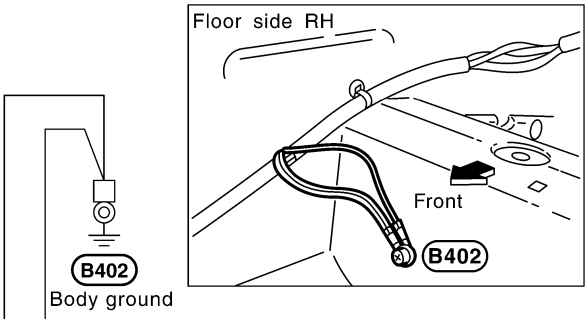
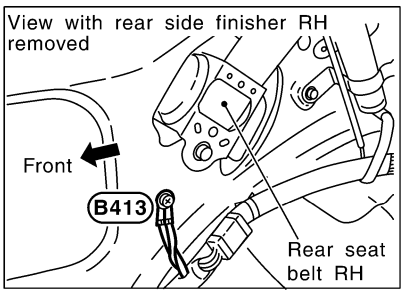
BODY NO.2 HARNESS



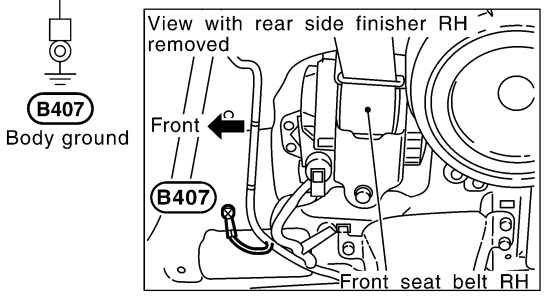
CON-NECTOR NUMBER	CONNECT TO
B406	Seat belt buckle switch (Passenger side)
B502	Passenger side seat control unit
B503	Power seat switch (Sliding switch) (Passenger side)
B505	Front seat cushion heater (Passenger side)

B405 B501 Power seat sub-harness (Passenger side)*

CON-NECTOR NUMBER	CONNECT TO
B419	Trunk lid opener actuator
B420	Trunk Room lamp switch
B421	High-mounted stop lamp (In the rear air spoiler)



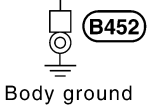
CON-NECTOR NUMBER	CONNECT TO
B409	Shield wire [RH side air bag (Satellite) sensor]

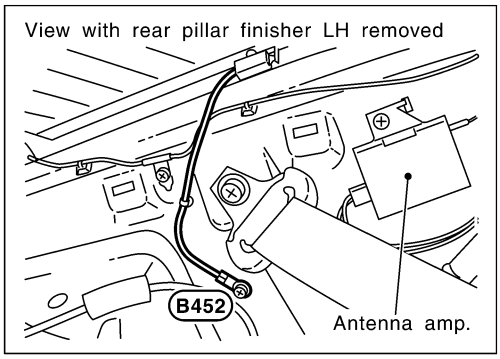


* : This sub-harness is not shown in "HARNESS LAYOUT".

CKIM0264E

CON-NECTOR NUMBER	CONNECT TO
B451	Rear window defogger (−)





CKIT0254E

HARNESS

PFP:00011

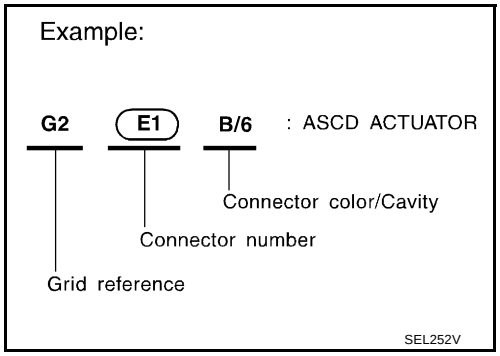
Harness Layout

AKS003IB

HOW TO READ HARNESS LAYOUT

The following Harness Layouts use a map style grid to help locate connectors on the drawings:

- Main Harness
- Engine Room Harness (Engine Compartment)
- Engine Control Harness
- Body Harness (Passenger Compartment)
- Body No.2 Harness



To use the grid reference

1. Find the desired connector number on the connector list.
2. Find the grid reference.
3. On the drawing, find the crossing of the grid reference letter column and number row.
4. Find the connector number in the crossing zone.
5. Follow the line (if used) to the connector.

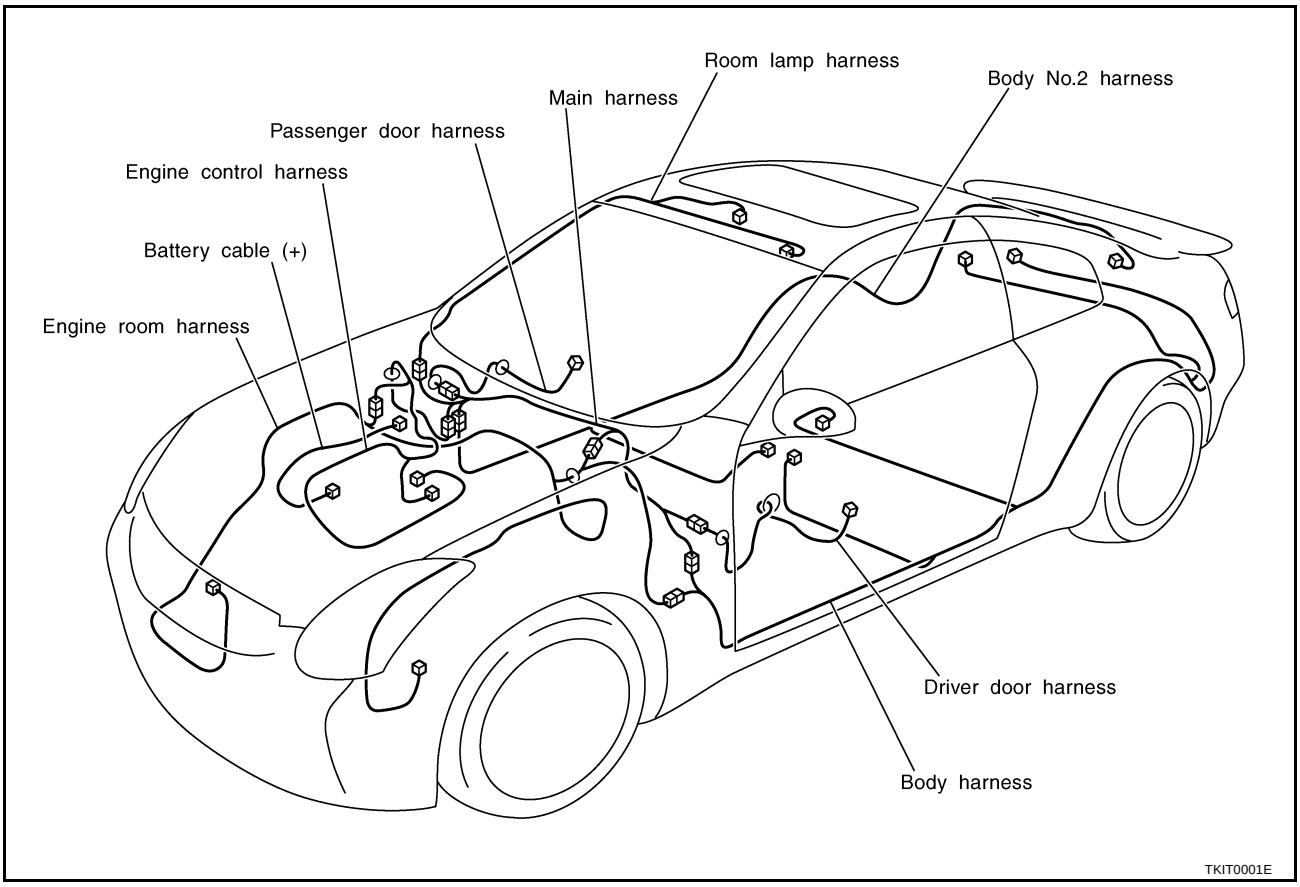
CONNECTOR SYMBOL

Main symbols of connector (in Harness Layout) are indicated in the below.

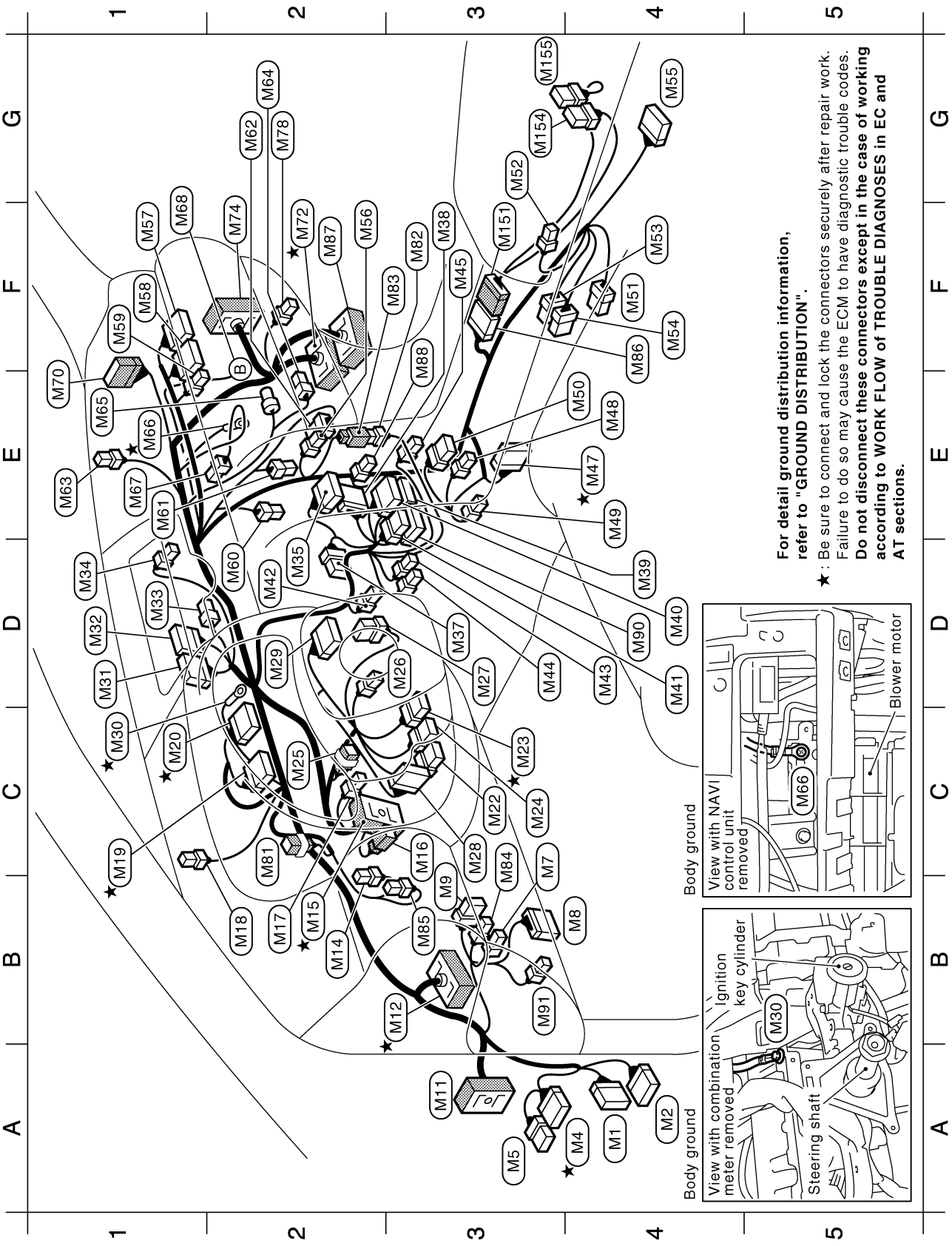
Connector type	Water proof type		Standard type	
	Male	Female	Male	Female
• Cavity: Less than 4 • Relay connector				
• Cavity: From 5 to 8				
• Cavity: More than 9				
• Ground terminal etc.	—			

CKIT0108E

OUTLINE


Room lamp harness
Body No.2 harness
Main harness
Passenger door harness
Engine control harness
Battery cable (+)
Engine room harness
Driver door harness
Body harness
TKIT0001E

MAIN HARNESS



TKIM0121E

A4	M1	W/40	:	BCM (Body control module)
A4	M2	B/15	:	BCM (Body control module)
A4 ★	M4	W/16	:	Fuse block (J/B)
A3	M5	W/8	:	Fuse block (J/B)
C3	M7	W/3	:	Illumination control switch
B4	M8	W/16	:	Data link connector
B3	M9	GY/6	:	VDC off switch
A3	M11	SMJ	:	To D1
B3 ★	M12	SMJ	:	To B1
B2	M14	W/2	:	Circuit breaker
B2 ★	M15	SMJ	:	To E108
C3	M16	Y/4	:	To E109
B2	M17	W/3	:	Air mix door motor (Driver side)
B2	M18	B/2	:	Sunload sensor
C1 ★	M19	BR/24	:	Combination meter
C1 ★	M20	W/24	:	Combination meter
C3	M22	W/8	:	Steering angle sensor
C3 ★	M23	GY/8	:	Combination switch (Spiral cable)
C3	M24	Y/6	:	Combination switch (Spiral cable)
C2	M25	BR/2	:	Key switch
D3	M26	W/2	:	Ignition key hole illumination
D3	M27	W/8	:	NATS antenna amp.
C3	M28	W/10	:	Door mirror remote control switch
D2	M29	W/16	:	Combination switch
C1 ★	M30	—	:	Body ground
D1	M31	GY/20	:	Display and A/C auto amp.
D1	M32	GY/16	:	Display and A/C auto amp.
D1	M33	W/4	:	Clock
D1	M34	W/2	:	Security indicator lamp
D2	M35	W/24	:	Display unit (With navigation system)
D3	M37	W/8	:	NAVI switch (With navigation system)
F3	M38	W/12	:	A/C and audio controller
D4	M39	W/16	:	Audio unit
D4	M40	W/10	:	Audio unit
D4	M41	W/6	:	Audio unit
D2	M42	W/2	:	In-vehicle sensor
D4	M43	W/2	:	Cigarette lighter illumination
D3	M44	B/2	:	Cigarette lighter socket
F3	M45	BR/2	:	Antenna amp. (Via sub-harness)
E4 ★	M47	W/10	:	A/T device (With A/T)
E4	M48	BR/2	:	A/T illumination (With A/T)
E4	M49	W/2	:	Ashtray illumination
E4	M50	W/8	:	Hazard switch
F4	M51	B/6	:	Yaw rate/side G sensor
G3	M52	B/2	:	Power socket (Floor console box) (With A/T)
F4	M53	BR/6	:	Heated seat switch (Passenger side) (With A/T and heated seat)
F4	M54	W/6	:	Heated seat switch (Driver side) (With A/T and heated seat)
G4	M55	Y/28	:	Air bag diagnosis sensor unit
F2	M56	W/2	:	Trunk lid opener cancel switch
F1	M57	W/24	:	NAVI control unit (With navigation system)
F1	M58	GY/24	:	NAVI control unit (With navigation system)
F1	M59	GY/2	:	NAVI control unit (With navigation system)
D2	M60	W/3	:	Heater and cooling unit (Via sub-harness)
E1	M61	W/4	:	Intake sensor
G2	M62	W/6	:	Blower motor
E1	M63	W/3	:	Optical sensor
G2	M64	W/2	:	Glove box lamp
E1	M65	Y/4	:	Front passenger air bag module
E1 ★	M66	—	:	Body ground
E1	M67	W/3	:	Intake door motor
F1	M68	Bulb	:	Upper glove box lamp (Without navigation system)
E1	M70	W/18	:	To R2
F2 ★	M72	SMJ	:	To F102
F2	M74	SMJ	:	To D31
G2	M78	W/4	:	Remote keyless entry receiver
C2	M81	W/4	:	Compass
F3	M82	W/4	:	To M83 (With navigation system)
F3	M83	W/4	:	To M82 (With navigation system)
C3	M84	B/2	:	Trunk lid opener switch
B3	M85	L/4	:	Heated seat relay (With heated seat)
F4	M86	W/12	:	To M151 (With M/T)
F2	M87	SMJ	:	To B401
F3	M88	B/2	:	Power socket (Instrument side panel RH)
D4	M90	W/12	:	Audio unit
B3	M91	W/2	:	Tire pressure warning check switch

Switch sub-harness (With M/T)

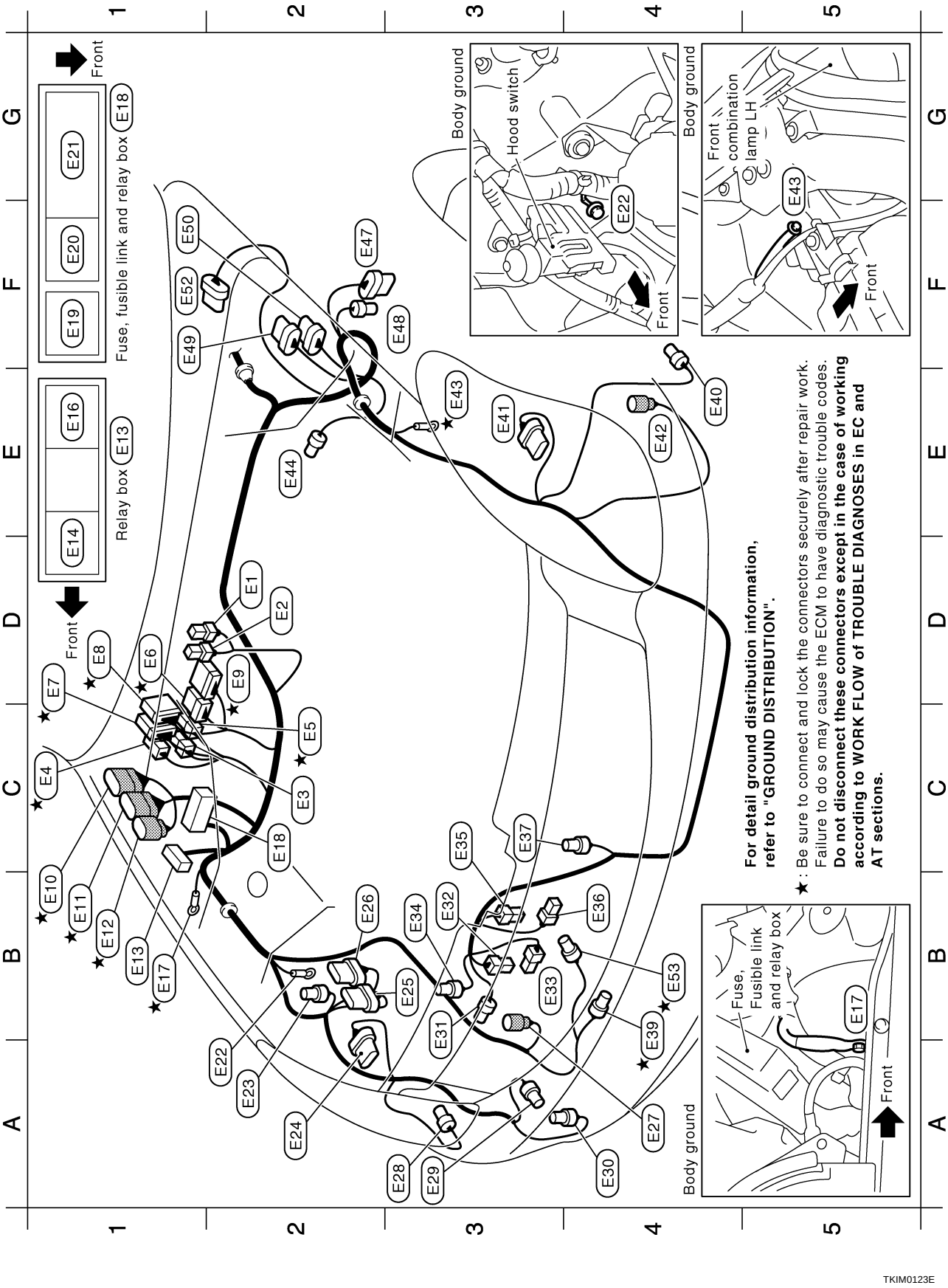
F3	M151	W/12	:	To M86
G3	M154	W/6	:	Heated seat switch (Driver side)
G3	M155	BR/6	:	Heated seat switch (Passenger side)

★: Be sure to connect and lock the connectors securely after repair work. Failure to do so may cause the ECM to have diagnostic trouble codes. **Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.**

TKIM0122E

ENGINE ROOM HARNESS

Engine Compartment



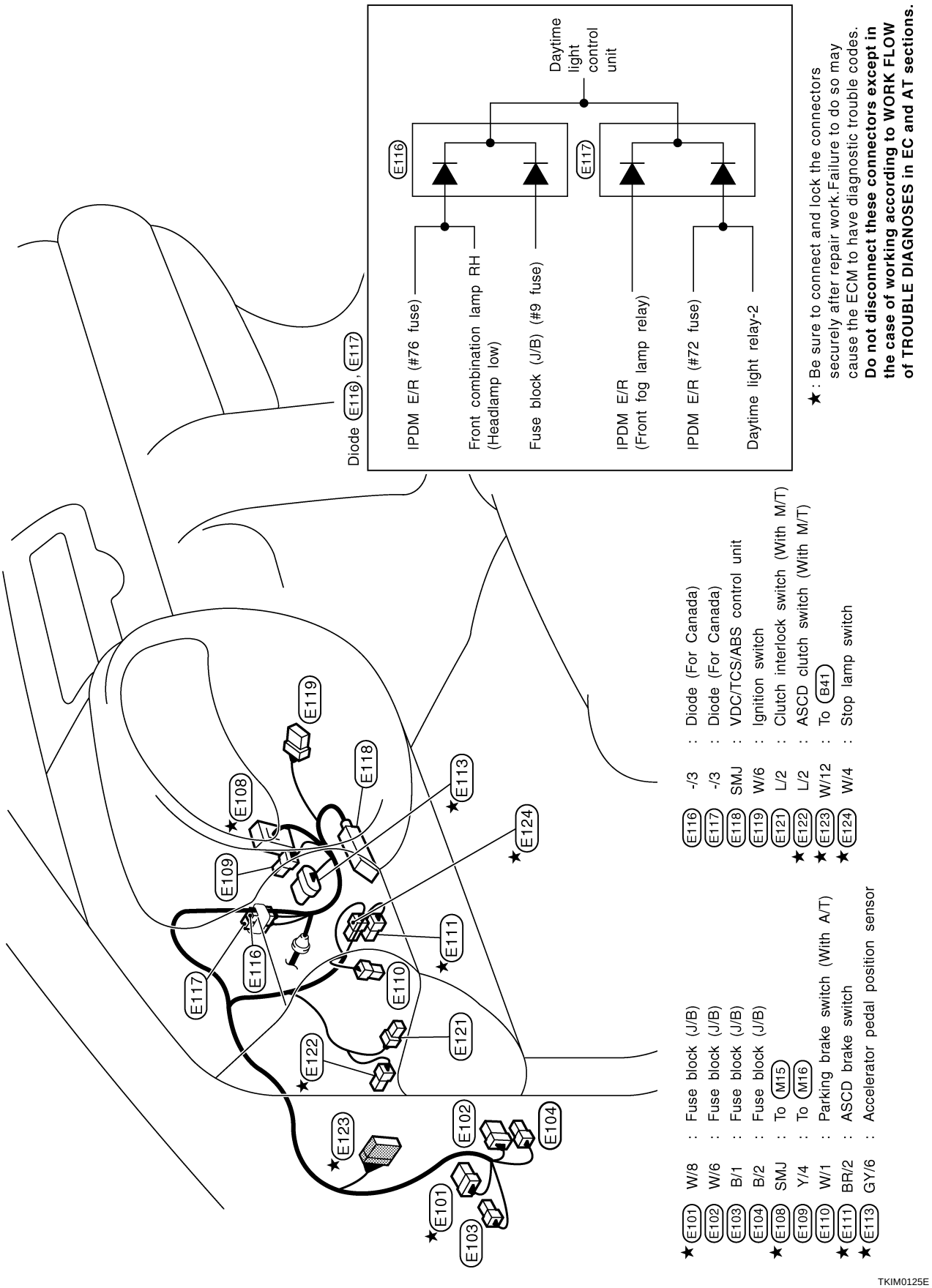
TKIM0123E

D2	E1	B/2	:	Fusible link holder
D2	E2	GY/2	:	Fusible link holder
C2	E3	B/2	:	IPDM E/R (Intelligent power distribution module engine room)
C1★	E4	W/4	:	IPDM E/R (Intelligent power distribution module engine room)
C2★	E5	B/4	:	IPDM E/R (Intelligent power distribution module engine room)
D1★	E6	W/6	:	IPDM E/R (Intelligent power distribution module engine room)
D1★	E7	GY/16	:	IPDM E/R (Intelligent power distribution module engine room)
D1★	E8	W/12	:	IPDM E/R (Intelligent power distribution module engine room)
D2★	E9	W/16	:	IPDM E/R (Intelligent power distribution module engine room)
B1★	E10	GY/9	:	To F1
B1★	E11	GY/10	:	To F2
B1★	E12	B/8	:	To F3
B1	E13	—	:	Relay box (For Canada)
D1	E14	L/4	:	Daytime light relay-1 (For Canada)
E1	E16	L/4	:	Daytime light relay-2 (For Canada)
B1★	E17	—	:	Body ground
C2	E18	—	:	Fuse, fusible link and relay box
F1	E19	L/4	:	Back-up lamp relay (With A/T)
F1	E20	W/3	:	Horn relay
G1	E21	—	:	Fuse and fusible link block
A2	E22	—	:	Body ground
A2	E23	GY/2	:	Hood switch
A2	E24	B/8	:	Front combination lamp RH
B3	E25	GY/6	:	Daytime light control unit (For Canada)
B2	E26	GY/8	:	Daytime light control unit (For Canada)
A4	E27	GY/2	:	Front wheel sensor RH
A3	E28	GY/2	:	Front side marker lamp RH
A3	E29	GY/2	:	Front washer motor
A4	E30	BR/2	:	Washer level sensor
B3	E31	B/3	:	Refrigerant pressure sensor
B3	E32	B/1	:	Horn (Low)
B3	E33	B/1	:	Horn (Low)
B3	E34	B/2	:	Ambient sensor
C3	E35	B/1	:	Horn (High)
B4	E36	B/1	:	Horn (High)
C3	E37	Y/2	:	Crash zone sensor
B4★	E39	GY/4	:	Cooling fan motor-1
E4	E40	GY/2	:	Front side marker lamp LH
E3	E41	B/8	:	Front combination lamp LH
E4	E42	B/2	:	Front wheel sensor LH
E3★	E43	—	:	Body ground
E2	E44	GY/2	:	Brake fluid level switch
F2	E47	B/8	:	VDC relay box
F3	E48	B/2	:	VDC relay box
F1	E49	GY/8	:	VDC actuator
F1	E50	B/8	:	VDC actuator
F1	E52	GY/5	:	Front wiper motor
B4★	E53	GY/4	:	Cooling fan motor-2

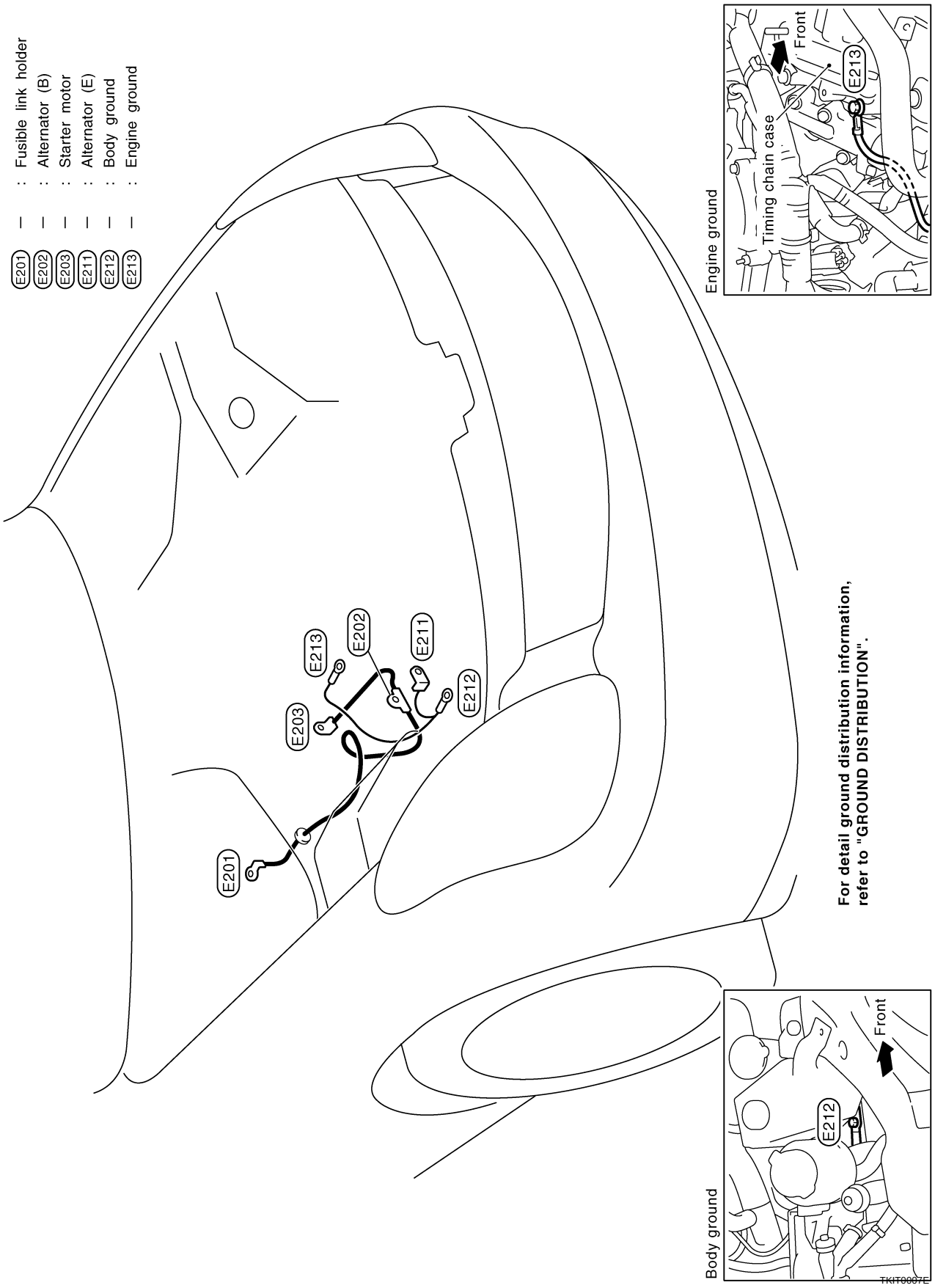
★: Be sure to connect and lock the connectors securely after repair work. Failure to do so may cause the ECM to have diagnostic trouble codes. **Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.**

TKIM0124E

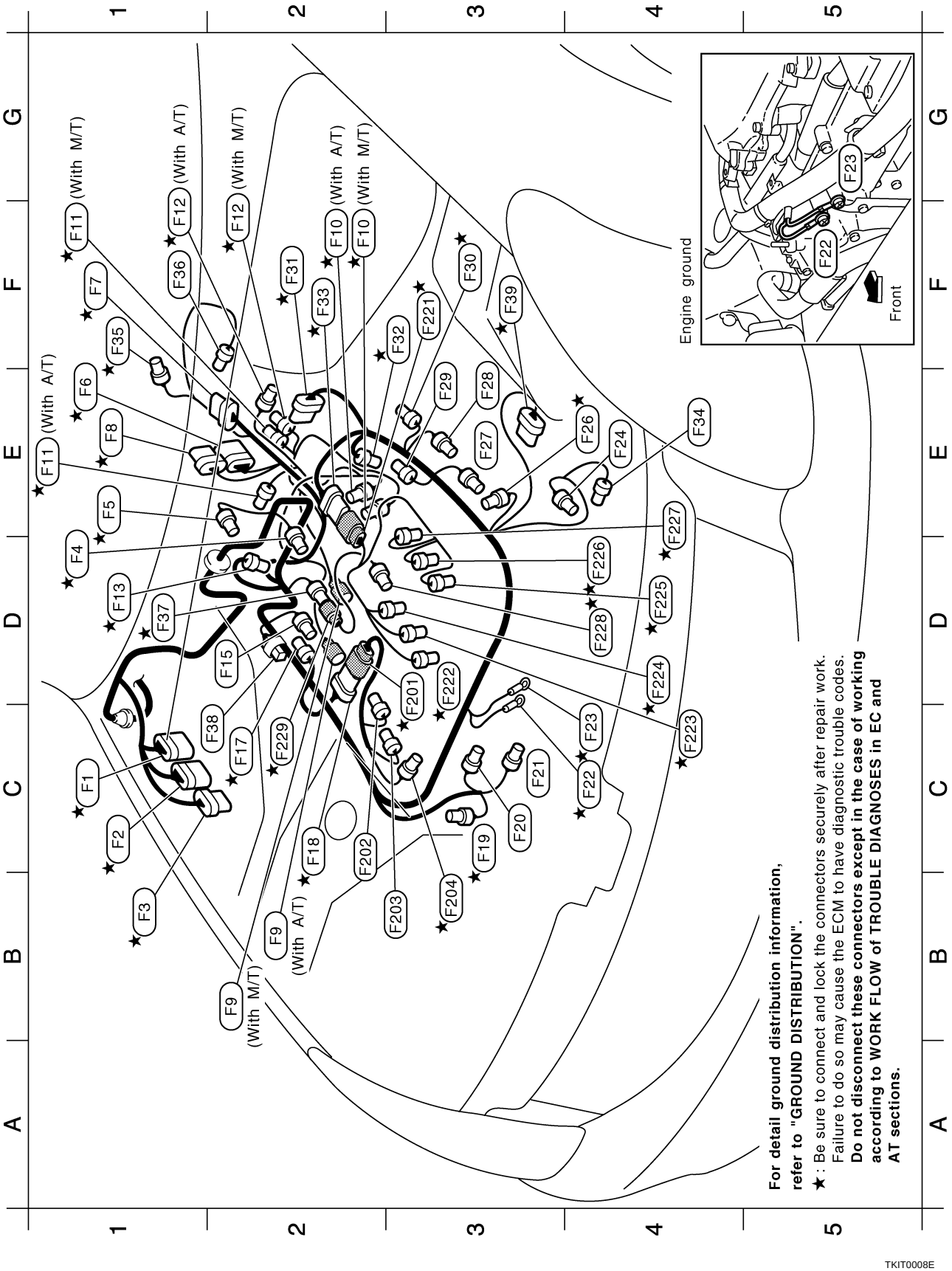
Passenger Compartment



Battery Cable



ENGINE CONTROL HARNESS



TKIT0008E

C1 ★F1 GY/9 : To E10
C1 ★F2 GY/10 : To E11
B1 ★F3 B/8 : To E12
D1 ★F4 G/3 : Camshaft position sensor (PHASE) (Bank 1)
E1 ★F5 GY/2 : EVAP canister purge volume control solenoid valve
E1 ★F6 GY/10 : A/T assembly (With A/T)
F1 ★F7 GY/8 : A/T assembly (With A/T)
E1 ★F8 B/8 : A/T assembly (With A/T)
B2 F9 GY/1 : Starter motor
F2 ★F10 B/3 : Crankshaft position sensor (POS)
E1,F1 ★F11 B/4 : Heated oxygen sensor 2 (Bank 1)
F1,F2 ★F12 GY/4 : Heated oxygen sensor 2 (Bank 2)
D1 ★F13 GY/2 : Engine coolant temperature sensor
D2 F15 GY/3 : Ignition coil No. 5 (With power transistor)
C2 ★F17 GY/4 : Heated oxygen sensor 1 (Bank 1)
C2 ★F18 B/6 : To F201
C3 ★F19 B/3 : Power steering pressure sensor
C3 F20 GY/2 : Alternator (S, L)
C3 F21 GY/1 : Oil pressure switch
C4 ★F22 — : Engine ground (With A/T)
C4 ★F23 — : Engine ground
E4 F24 B/1 : Compressor
E4 ★F26 GY/2 : Intake valve timing control solenoid valve (Bank 2)
E3 F27 GY/3 : Ignition coil No. 2 (With power transistor)
E3 F28 GY/3 : Ignition coil No. 4 (With power transistor)
E3 F29 GY/3 : Ignition coil No. 6 (With power transistor)
F3 ★F30 GY/4 : Heated oxygen sensor 1 (Bank 2)
F2 ★F31 GY/6 : Electric throttle control actuator
F3 ★F32 B/3 : Camshaft position sensor (PHASE) (Bank 2)
F2 ★F33 GY/8 : To F221
E4 F34 B/2 : Compressor
F1 ★F35 B/2 : Park/Neutral position switch (With M/T)
F1 F36 B/2 : Back-up lamp switch (With M/T)
D1 ★F37 B/2 : To F229
C2 F38 W/2 : Condenser
F3 ★F39 B/6 : Mass air flow sensor

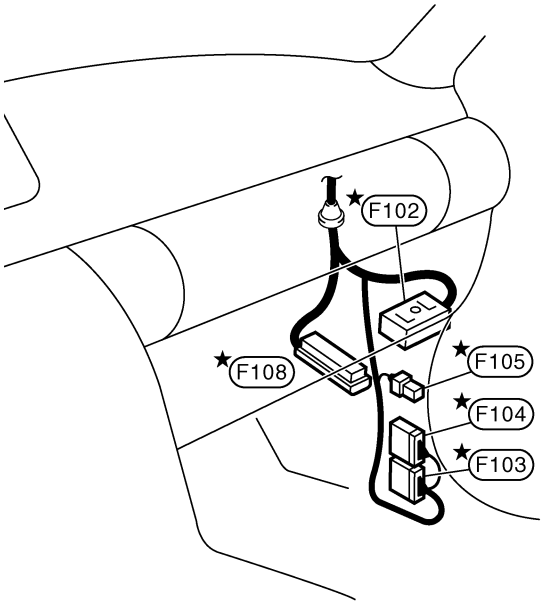
Engine control sub-harness-1

D3 ★F201 L/6 : To F18
C2 F202 GY/3 : Ignition coil No. 3 (With power transistor)
B3 F203 GY/3 : Ignition coil No. 1 (With power transistor)
B3 ★F204 G/2 : Intake valve timing control solenoid valve (Bank 1)

Engine control sub-harness-2

F3 ★F221 G/8 : To F33
D3 ★F222 GY/2 : Injector No. 1
C4 ★F223 GY/2 : Injector No. 3
D4 ★F224 GY/2 : Injector No. 5
D4 ★F225 GY/2 : Injector No. 2
D4 ★F226 GY/2 : Injector No. 4
E4 ★F227 GY/2 : Injector No. 6
D4 ★F228 L/2 : Knock sensor
C2 ★F229 SB/2 : To F37

Passenger compartment



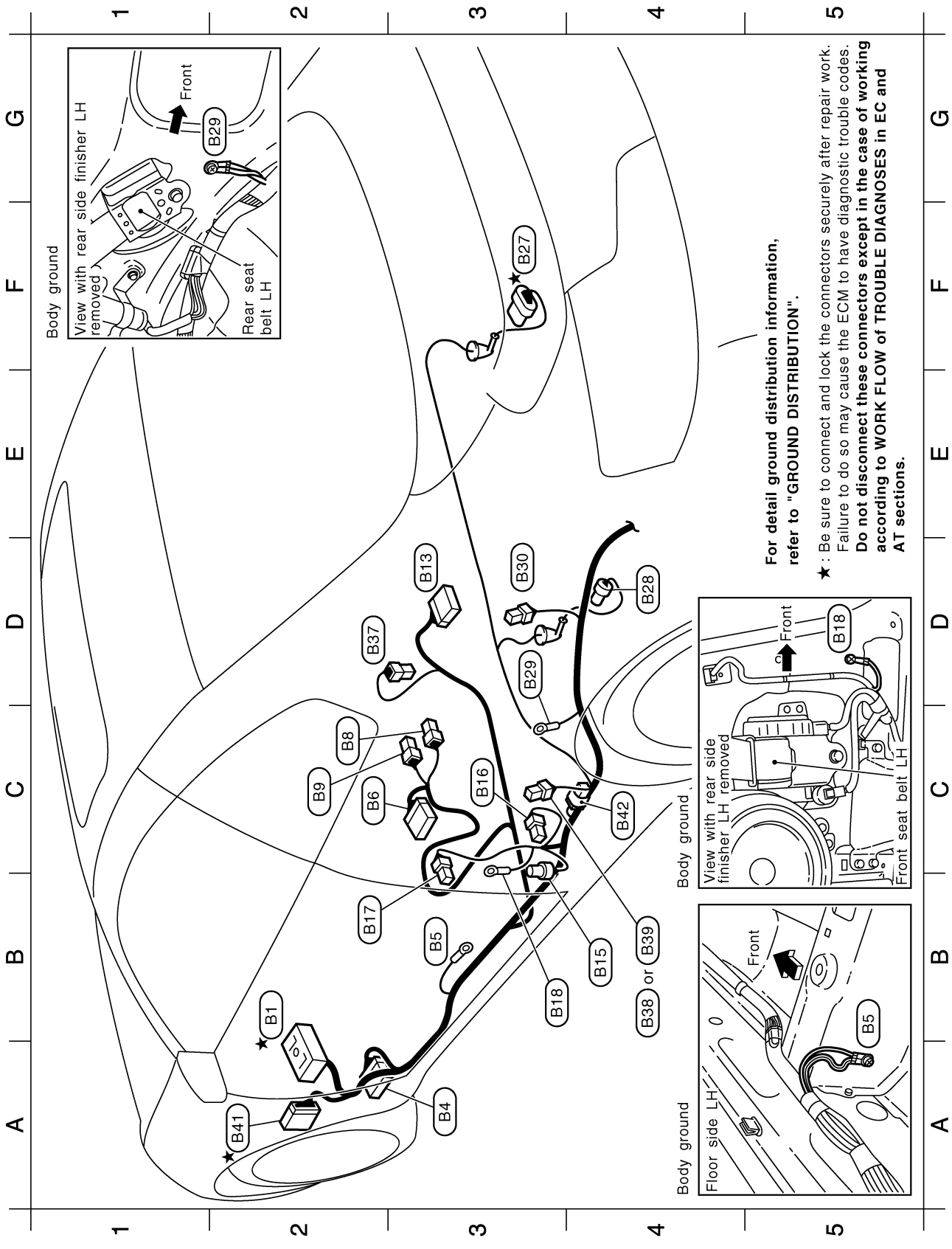
★F102 SMJ : To M72
★F103 W/24 : TCM (Transmission control module) (With A/T)
★F104 GY/24 : TCM (Transmission control module) (With A/T)
★F105 L/4 : A/T PV IGN relay (With A/T)
★F108 SMJ : ECM

★: Be sure to connect and lock the connectors securely after repair work. Failure to do so may cause the ECM to have diagnostic trouble codes. **Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.**

TKIM0126E

BODY HARNESS

Passenger Compartment



TKIM0127E

B2 ★	B1	SMJ	:	To M12
A3	B4	W/15	:	BCM (Body control module)
B3	B5	—	:	Body ground
C2	B6	W/12	:	Front power seat (Driver side)
C2	B8	W/3	:	Seat belt buckle switch (Driver side)
C2	B9	Y/2	:	Front LH side air bag module
D3	B13	Y/12	:	Air bag diagnosis sensor unit
B4	B15	Y/2	:	LH side air bag (satellite) sensor
C3	B16	Y/2	:	Front LH seat belt pre-tensioner
B2	B17	W/3	:	Driver side door switch
B3	B18	—	:	Body ground
F3 ★	B27	GY/5	:	Fuel level sensor unit and fuel pump
D4	B28	GY/2	:	Fuel level sensor unit (Sub)
D3	B29	—	:	Body ground
D3	B30	Y/2	:	LH side curtain air bag module
D2	B37	B/1	:	Parking brake switch (With M/T)
B4	B38	W/2	:	Rear speaker LH (Without BOSE system)
B4	B39	BR/2	:	Rear speaker LH (With BOSE system)
A2 ★	B41	W/12	:	To E123
C4	B42	W/2	:	Condenser

★: Be sure to connect and lock the connectors securely after repair work. Failure to do so may cause the ECM to have diagnostic trouble codes. **Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.**

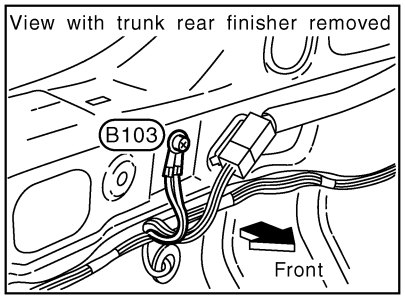
TKIM0128E

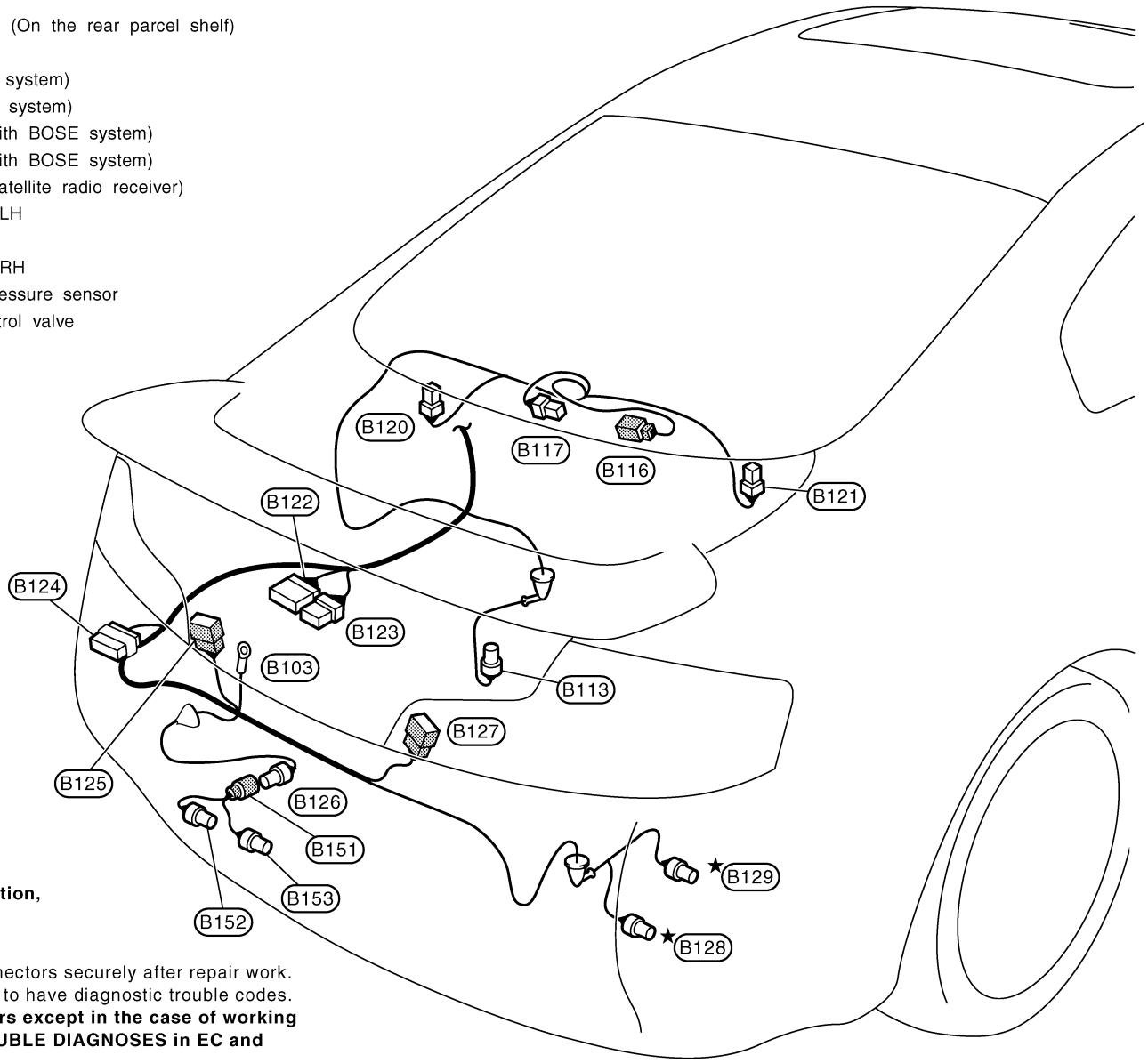
B103	—	:	Body ground
B113	SB/4	:	Rear wheel sensor
B116	BR/2	:	High-mounted stop lamp (On the rear parcel shelf)
B117	W/2	:	Trunk room lamp
B120	W/2	:	Woofer LH (With BOSE system)
B121	W/2	:	Woofer RH (With BOSE system)
B122	B/24	:	BOSE speaker amp. (With BOSE system)
B123	GY/8	:	BOSE speaker amp. (With BOSE system)
B124	W/16	:	Option connector (For satellite radio receiver)
B125	W/6	:	Rear combination lamp LH
B126	GY/2	:	To B151
B127	W/6	:	Rear combination lamp RH
★ B128	GY/3	:	EVAP control system pressure sensor
★ B129	B/2	:	EVAP canister vent control valve

License plate sub-harness

B151	GY/2	:	To B126
B152	BR/2	:	License plate lamp LH
B153	BR/2	:	License plate lamp RH

Body ground



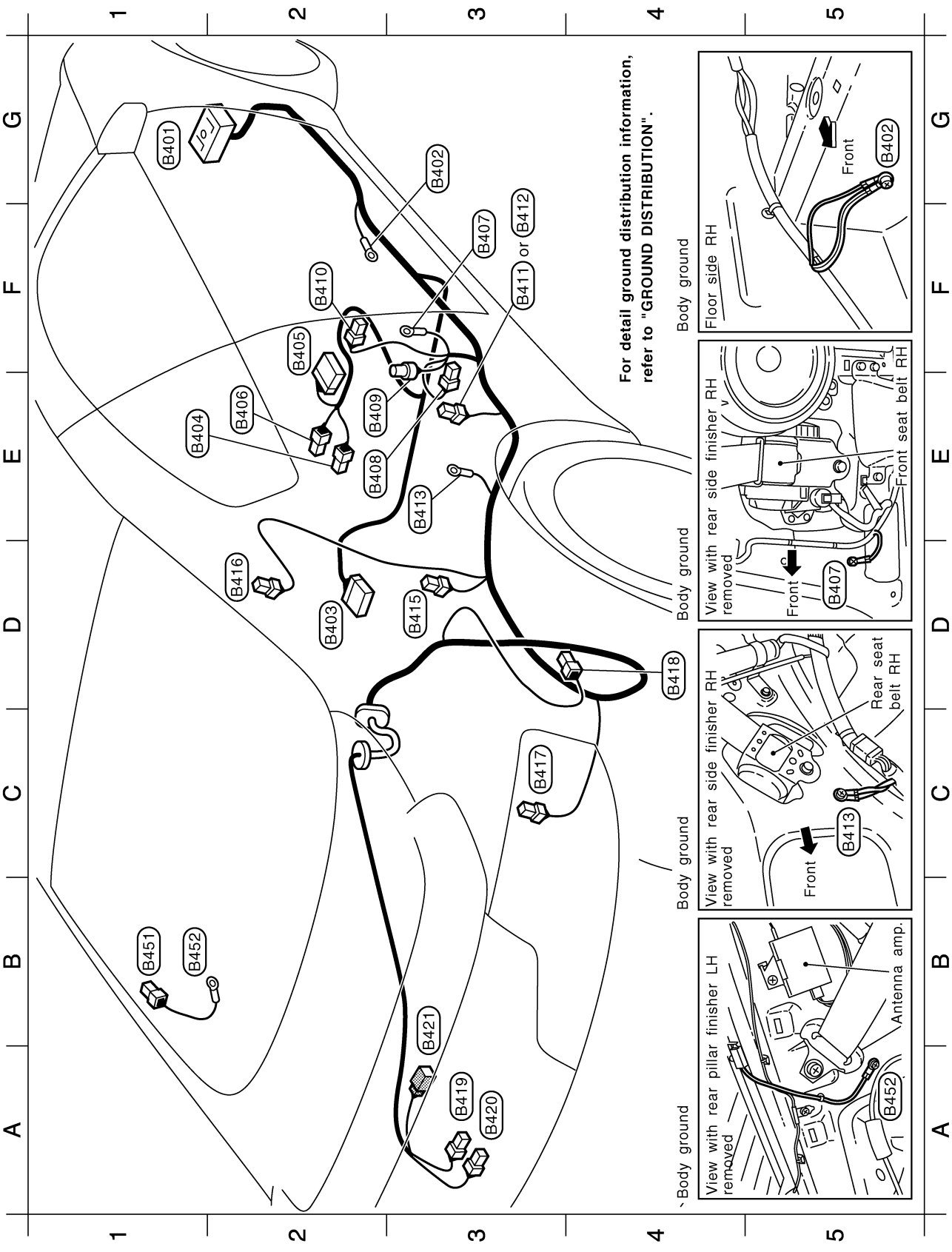


For detail ground distribution information, refer to "GROUND DISTRIBUTION".

★ : Be sure to connect and lock the connectors securely after repair work. Failure to do so may cause the ECM to have diagnostic trouble codes. **Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.**

TKIM0129E

BODY NO.2 HARNESS



TKIM0130E

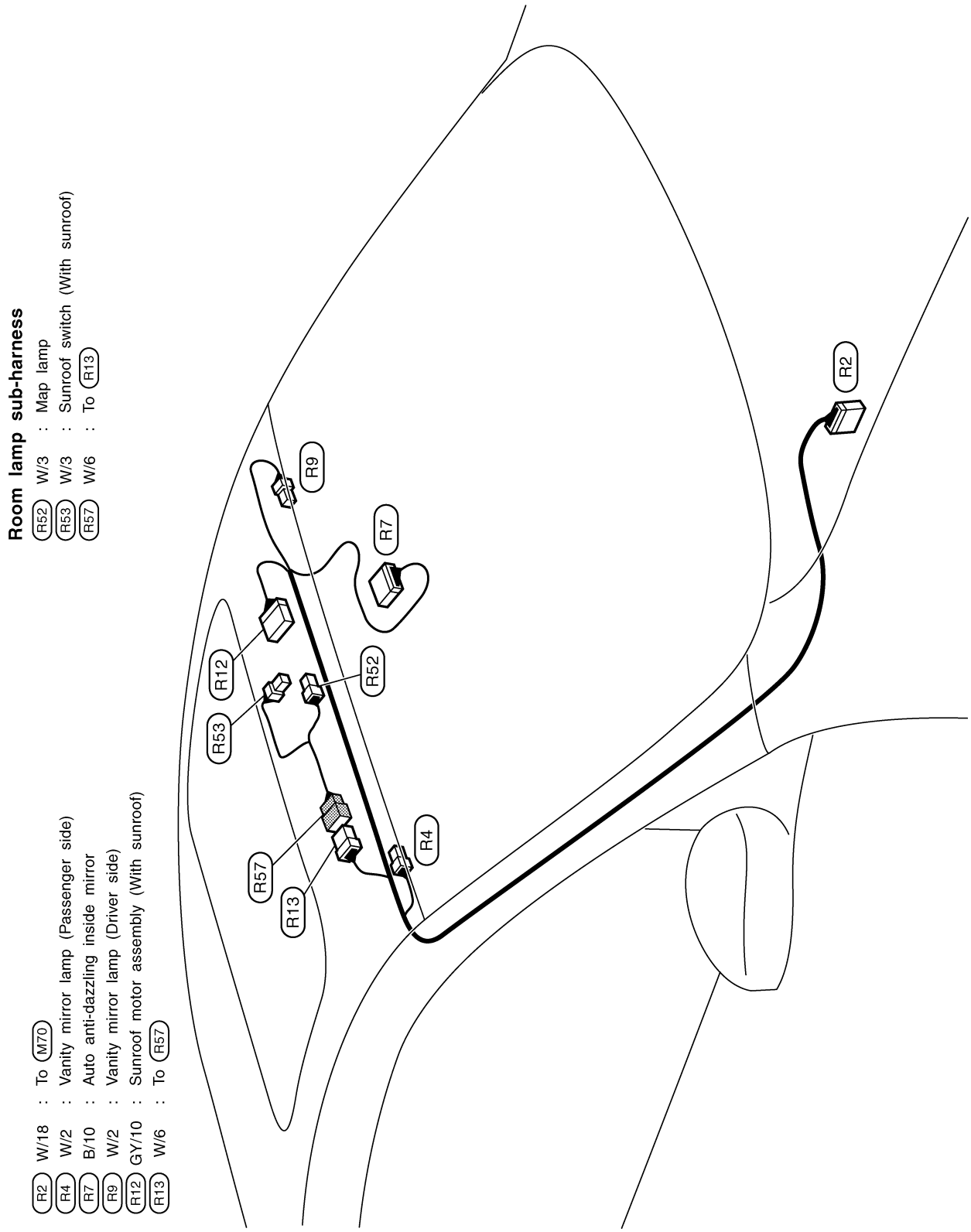
G1	B401	SMJ	:	To M87
G3	B402	—	:	Body ground
D2	B403	Y/12	:	Air bag diagnosis sensor unit
E1	B404	Y/2	:	Front RH side air bag module
F2	B405	W/12	:	Front power seat (Passenger side)
E2	B406	W/3	:	Seat belt buckle switch (Passenger side)
F3	B407	—	:	Body ground
E2	B408	Y/2	:	Front RH seat belt pre-tensioner
E2	B409	Y/2	:	RH side air bag (satellite) sensor
F2	B410	W/3	:	Passenger side door switch
F3	B411	W/2	:	Rear speaker RH (Without BOSE system)
F3	B412	BR/2	:	Rear speaker RH (With BOSE system)
E3	B413	—	:	Body ground
D3	B415	Y/2	:	RH side curtain air bag module
D2	B416	W/1	:	Condenser
C3	B417	BR/6	:	Rear window defogger relay
D4	B418	W/4	:	Fuel lid lock actuator
A3	B419	B/2	:	Trunk lid opener actuator
A3	B420	W/2	:	Trunk room lamp switch
B3	B421	BR/2	:	High-mounted stop lamp (In the rear spoiler)

Body sub-harness

B1	B451	B/1	:	Rear window defogger (-)
B1	B452	—	:	Body ground

TKIM0131E

ROOM LAMP HARNESS

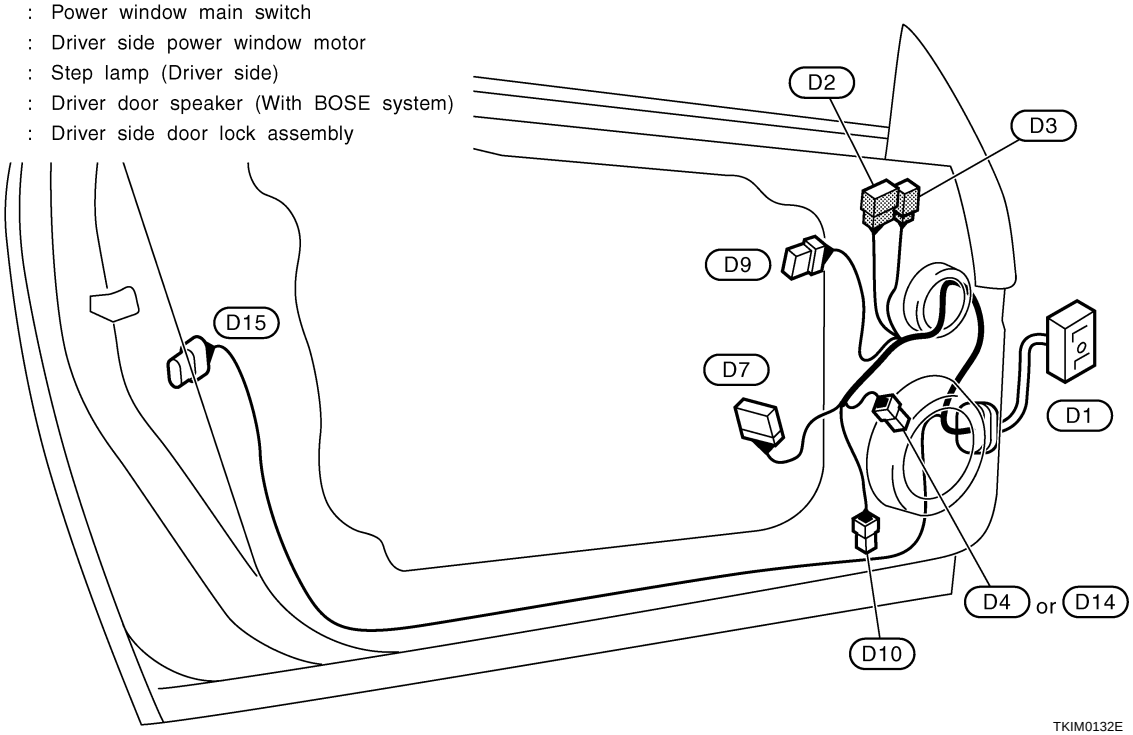


TKIT0015E

DOOR HARNESS

Driver Side Door

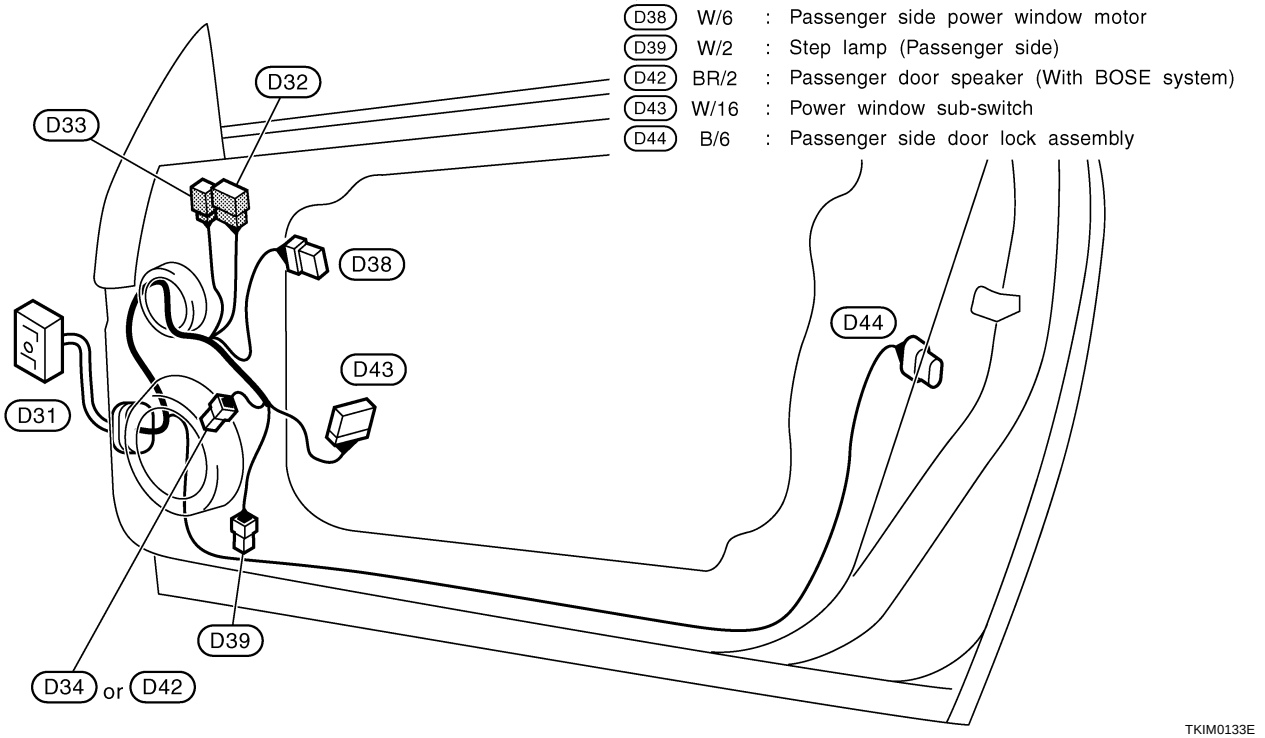
D1	SMJ	:	To M11
D2	W/8	:	Door mirror (Driver side)
D3	BR/2	:	Tweeter (Driver side)
D4	W/2	:	Driver door speaker (Without BOSE system)
D7	W/16	:	Power window main switch
D9	W/6	:	Driver side power window motor
D10	W/2	:	Step lamp (Driver side)
D14	BR/2	:	Driver door speaker (With BOSE system)
D15	B/6	:	Driver side door lock assembly



TKIM0132E

Passenger Side Door

D31	SMJ	:	To M74
D32	W/8	:	Door mirror (Passenger side)
D33	BR/2	:	Tweeter (Passenger side)
D34	W/2	:	Passenger door speaker (Without BOSE system)
D38	W/6	:	Passenger side power window motor
D39	W/2	:	Step lamp (Passenger side)
D42	BR/2	:	Passenger door speaker (With BOSE system)
D43	W/16	:	Power window sub-switch
D44	B/6	:	Passenger side door lock assembly



TKIM0133E

Wiring Diagram Codes (Cell Codes)

AKS003IC

Use the chart below to find out what each wiring diagram code stands for.
Refer to the wiring diagram code in the alphabetical index to find the location (page number) of each wiring diagram.

Code	Section	Wiring Diagram Name
A/C	ATC	Air Conditioner
APPS1	EC	Accelerator Pedal Position Sensor
APPS2	EC	Accelerator Pedal Position Sensor
APPS3	EC	Accelerator Pedal Position Sensor
ASCBOF	EC	Automatic Speed Control Device (ASCD) Brake Switch
ASC/BS	EC	Automatic Speed Control Device (ASCD) Brake Switch
ASCIND	EC	Automatic Speed Control Device (ASCD) Indicator
ASC/SW	EC	Automatic Speed Control Device (ASCD) Steering Switch
AT/IND	DI	A/T Indicator Lamp
AUDIO	AV	Audio
AUTO/L	LT	Automatic Light System
BACK/L	LT	Back-Up Lamp
BRK/SW	EC	Brake Switch
CAN	AT	CAN Communication Line
CAN	EC	CAN Communication Line
CAN	LAN	CAN System
CHARGE	SC	Charging System
CHIME	DI	Warning Chime
CIGAR	WW	Cigarette Lighter
CLOCK	DI	Clock
COMBSW	LT	Combination Switch
COMM	AV	Audio Visual Communication Line
COMPAS	DI	Compass and Thermometer
COOL/F	EC	Cooling Fan Control
D/C	AT	Direct Clutch Solenoid Valve
D/CF	AT	Direct Clutch Solenoid Valve Function
DEF	GW	Rear Window Defogger
D/LOCK	BL	Power Door Lock
DTRL	LT	Headlamp - With Daytime Light System
E/BRE	AT	A/T 1st Engine Braking
ECM/PW	EC	ECM Power Supply For Back-Up
ECTS	EC	Engine Coolant Temperature Sensor
ETC1	EC	Electrical Throttle Control Function
ETC2	EC	Electrical Throttle Control Motor Relay
ETC3	EC	Electrical Throttle Control Motor
F/FOG	LT	Front Fog Lamp
FPSW1	AT	ATF Pressure Switch 1
FPSW3	AT	ATF Pressure Switch 3
FPSW5	AT	ATF Pressure Switch 5
FPSW6	AT	ATF Pressure Switch 6
F/PUMP	EC	Fuel Pump

Code	Section	Wiring Diagram Name
FR/B	AT	Front Brake Solenoid Valve
FR/BF	AT	Front Brake Solenoid Valve Function
FTS	AT	A/T Fluid Temperature Sensor Circuit
FTTS	EC	Fuel Tank Temperature Sensor
FUELB1	EC	Fuel Injection System Function (Bank 1)
FUELB2	EC	Fuel Injection System Function (Bank 2)
H/LAMP	LT	Headlamp
HLR/C	AT	High and Low Reverse Clutch Solenoid Valve
HLR/CF	AT	High and Low Reverse Clutch Solenoid Valve Function
HORN	WW	Horn
HSEAT	SE	Heated Seat
IATS	EC	Intake Air Temperature Sensor
I/C	AT	Input Clutch Solenoid Valve
I/CF	AT	Input Clutch Solenoid Valve Function
IGNSYS	EC	Ignition System
ILL	LT	Illumination
I/LOCK	AT	A/T Interlock
I/MIRR	GW	Inside Mirror (Auto Anti-Dazzling Mirror)
INJECT	EC	Injector
IVCB1	EC	Intake Valve Timing Control Solenoid Valve Bank 1
IVCB2	EC	Intake Valve Timing Control Solenoid Valve Bank 2
KEYLES	BL	Remote Keyless Entry System
KS	EC	Knock Sensor
LC/B	AT	Low Coast Brake Solenoid Valve
LC/BF	AT	Low Coast Brake Solenoid Valve Function
LPSV	AT	Line Pressure Solenoid Valve
MAFS	EC	Mass Air Flow Sensor
MAIN	EC	Main Power Supply and Ground Circuit
METER	DI	Speedometer, Tachometer, Temp., and Fuel Gauges
MIL/DL	EC	MIL & Data Link Connector
MIRROR	GW	Power Door Mirror
MMSW	AT	Manual Mode Switch
NATS	BL	Nissan Anti - Theft System
NAVI	AV	Navigation System
NONDTC	AT	Non-Detective Items
O2H1B1	EC	Heated Oxygen Sensor 1 Heater Bank 1
O2H1B2	EC	Heated Oxygen Sensor 1 Heater Bank 2
O2H2B1	EC	Heated Oxygen Sensor 2 Heater Bank 1
O2H2B2	EC	Heated Oxygen Sensor 2 Heater Bank 2
O2S1B1	EC	Heated Oxygen Sensor 1 Bank 1
O2S1B2	EC	Heated Oxygen Sensor 1 Bank 2
O2S2B1	EC	Heated Oxygen Sensor 2 Bank 1
O2S2B2	EC	Heated Oxygen Sensor 2 Bank 2
PGC/V	EC	Evap Canister Purge Volume Control Solenoid Valve

Code	Section	Wiring Diagram Name
PHSB1	EC	Camshaft Position Sensor (Phase) (Bank1)
PHSB2	EC	Camshaft Position Sensor (Phase) (Bank2)
PNP/SW	AT	Park / Neutral Position Switch
PNP/SW	EC	Park / Neutral Position Switch
POS	EC	Crankshaft Position Sensor (Ckps) (Pos)
POWER	AT	Transmission Control Module Power Supply
POWER	PG	Power Supply Routing
PRE/SE	EC	Evap Control System Pressure Sensor
P/SCKT	WW	Power Socket
PS/SEN	EC	Power Steering Pressure Sensor
ROOM/L	LT	Interior Room Lamp
RP/SEN	EC	Refrigerant Pressure Sensor
SEAT	SE	Power Seat
SEN/PW	EC	Sensor Power Supply
SHIFT	AT	A/T Shift Lock System
SROOF	RF	Sunroof
SRS	SRS	Supplemental Restraint System
START	SC	Starting System
STOP/L	LT	Stop Lamp
STSIG	AT	Start Signal Circuit
TAIL/L	LT	Parking, License and Tail Lamps
TCCSIG	AT	A/T Tcc S/V Function (Lock-Up)
TCV	AT	Torque Converter Clutch Solenoid Valve
TLID	BL	Trunk Lid Opener
TPS1	EC	Throttle Position Sensor (Sensor 1)
TPS2	EC	Throttle Position Sensor (Sensor 2)
TPS3	EC	Throttle Position Sensor
TRNSCV	BL	Homelink Universal Transceiver
TRSA/T	AT	Turbine Revolution Sensor
TURN	LT	Turn Signal and Hazard Warning Lamp
T/WARN	WT	Tire Pressure Warning System
VDC	BRC	Vehicle Dynamics Control System
VEHSEC	BL	Vehicle Security System
VENT/V	EC	Evap Canister Vent Control Valve
VSSA/T	AT	Vehicle Speed Sensor A/T (Revolution Sensor)
W/ANT	AV	Audio Antenna
WARN	DI	Warning Lamps
WINDOW	GW	Power Window
WIPER	WW	Front Wiper and Washer

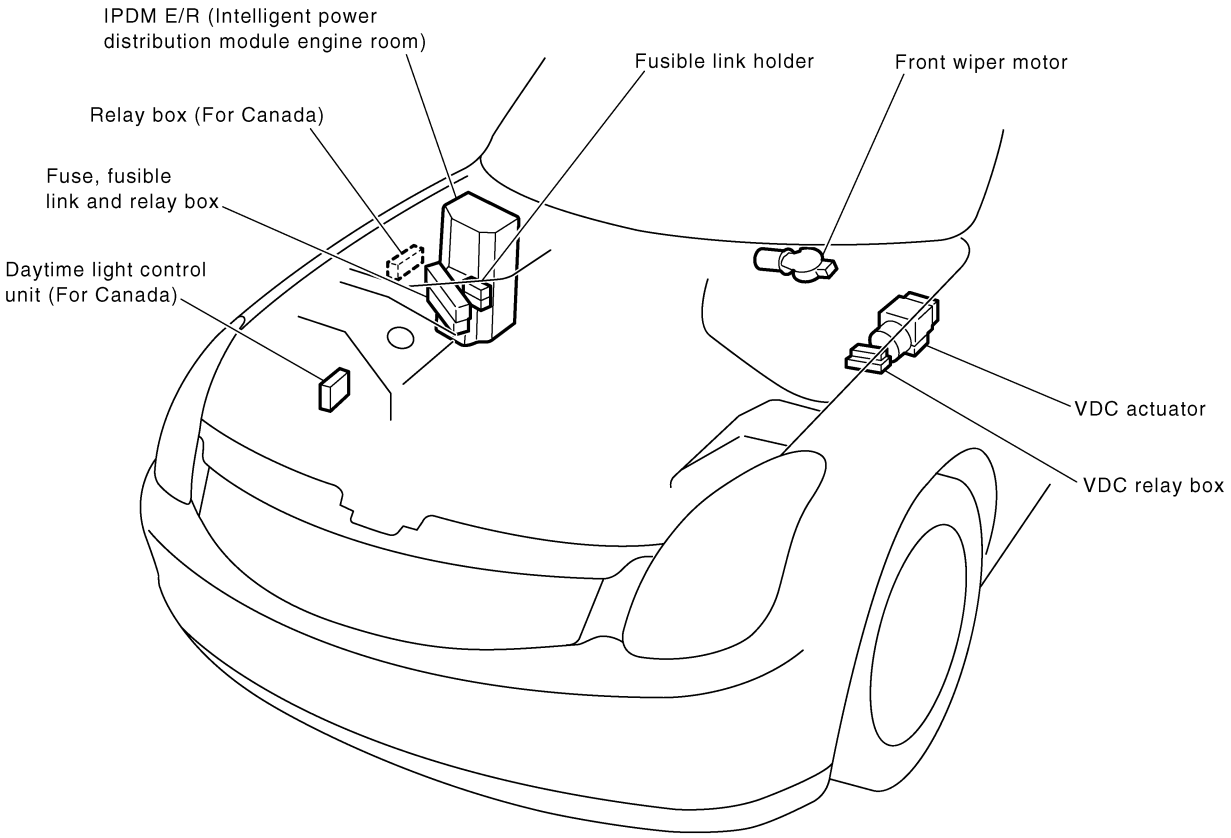
ELECTRICAL UNITS LOCATION

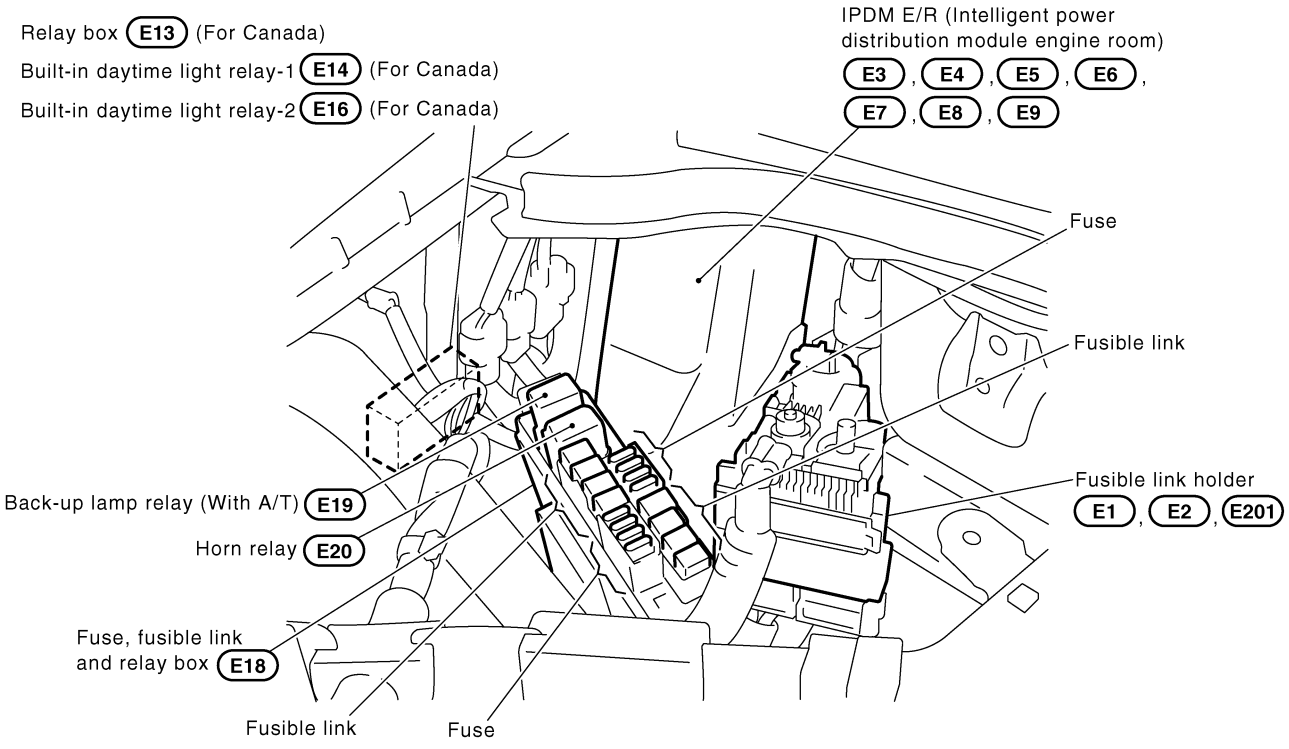
PFP:25230

Electrical Units Location

AKS003ID

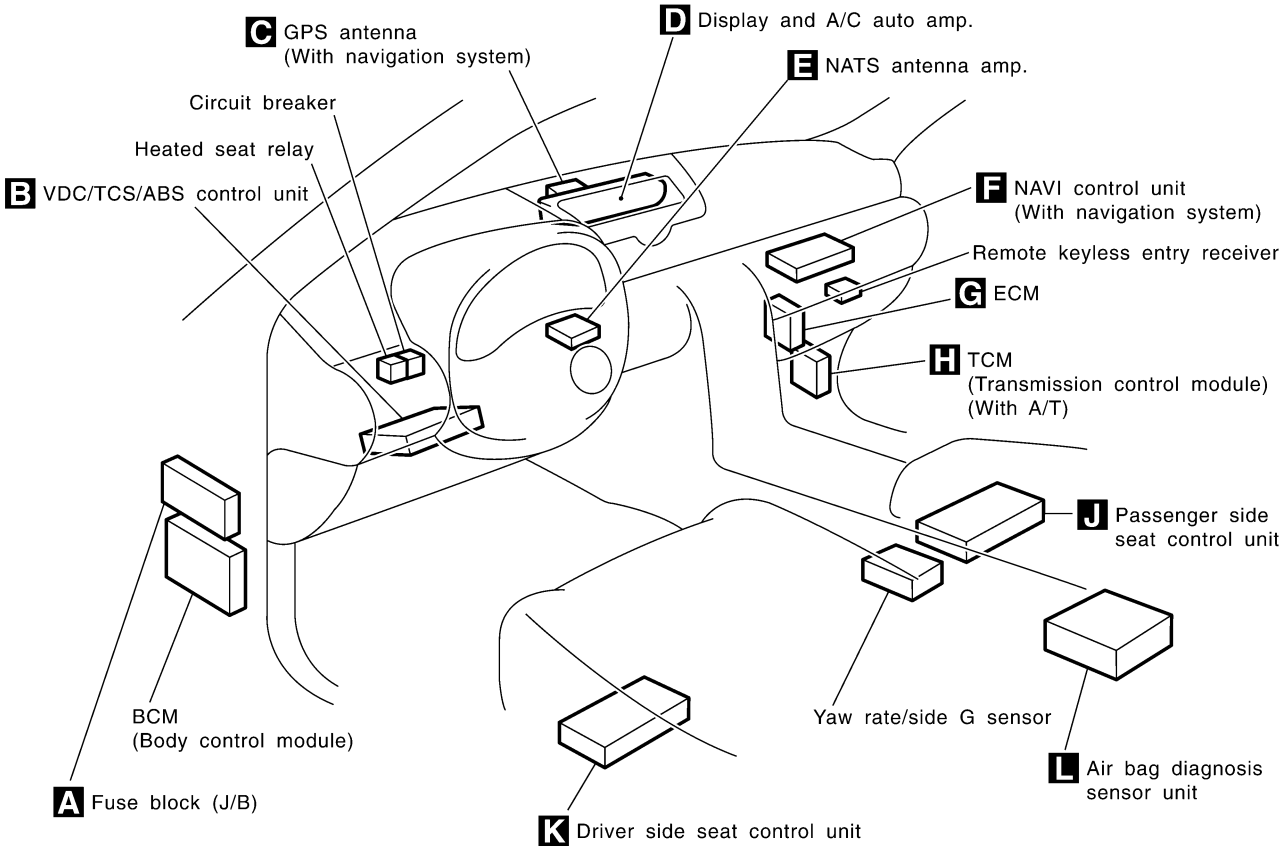
ENGINE COMPARTMENT

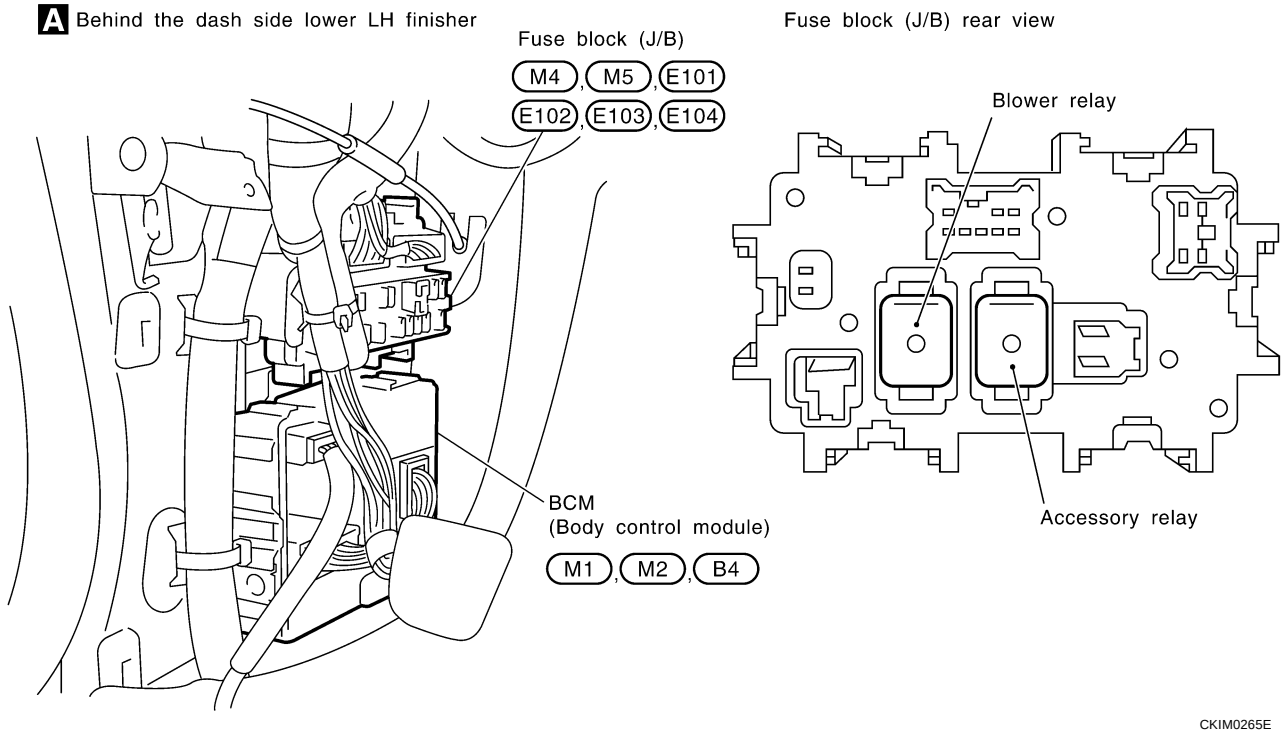




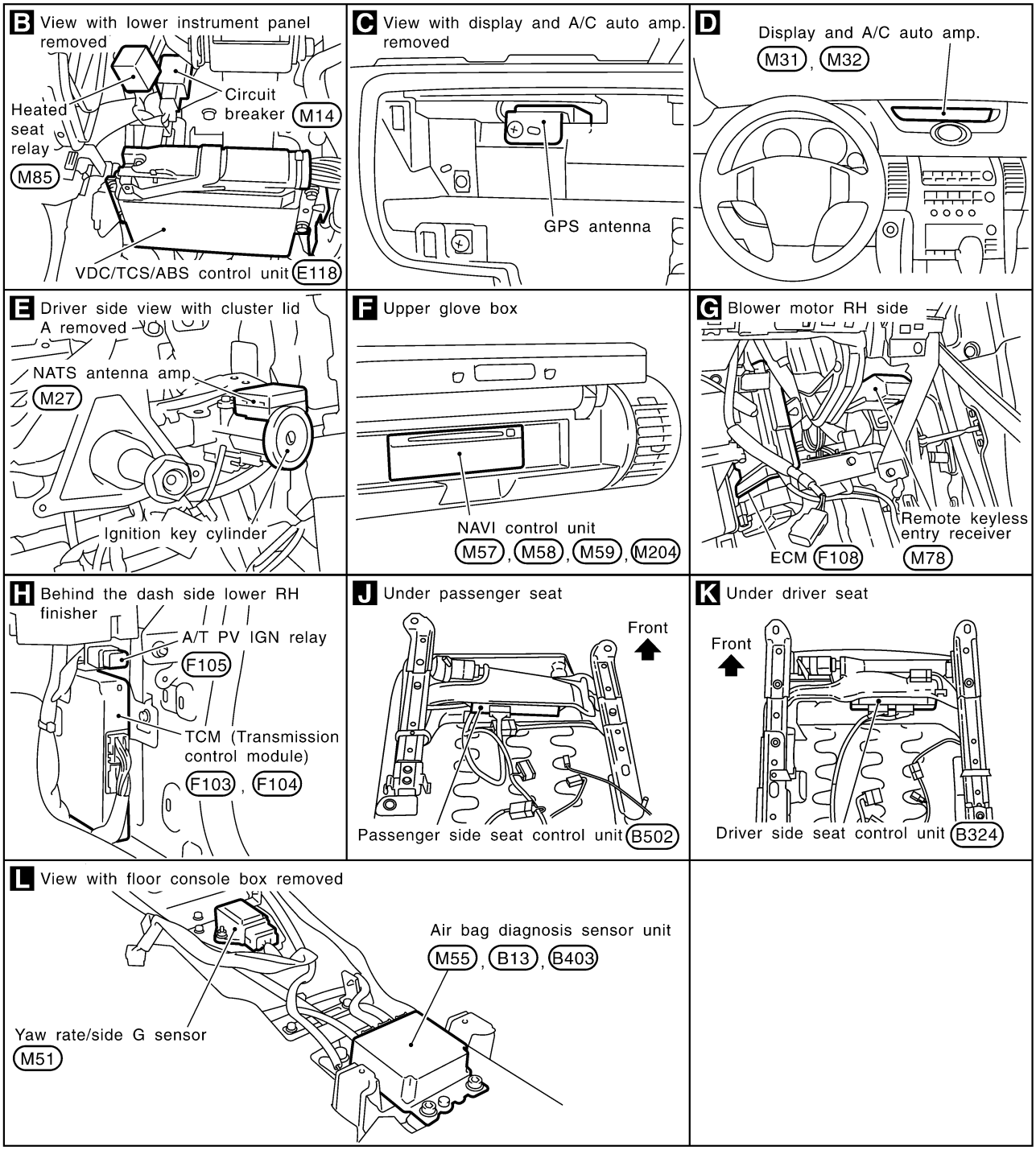
CKIT0237E

PASSENGER COMPARTMENT



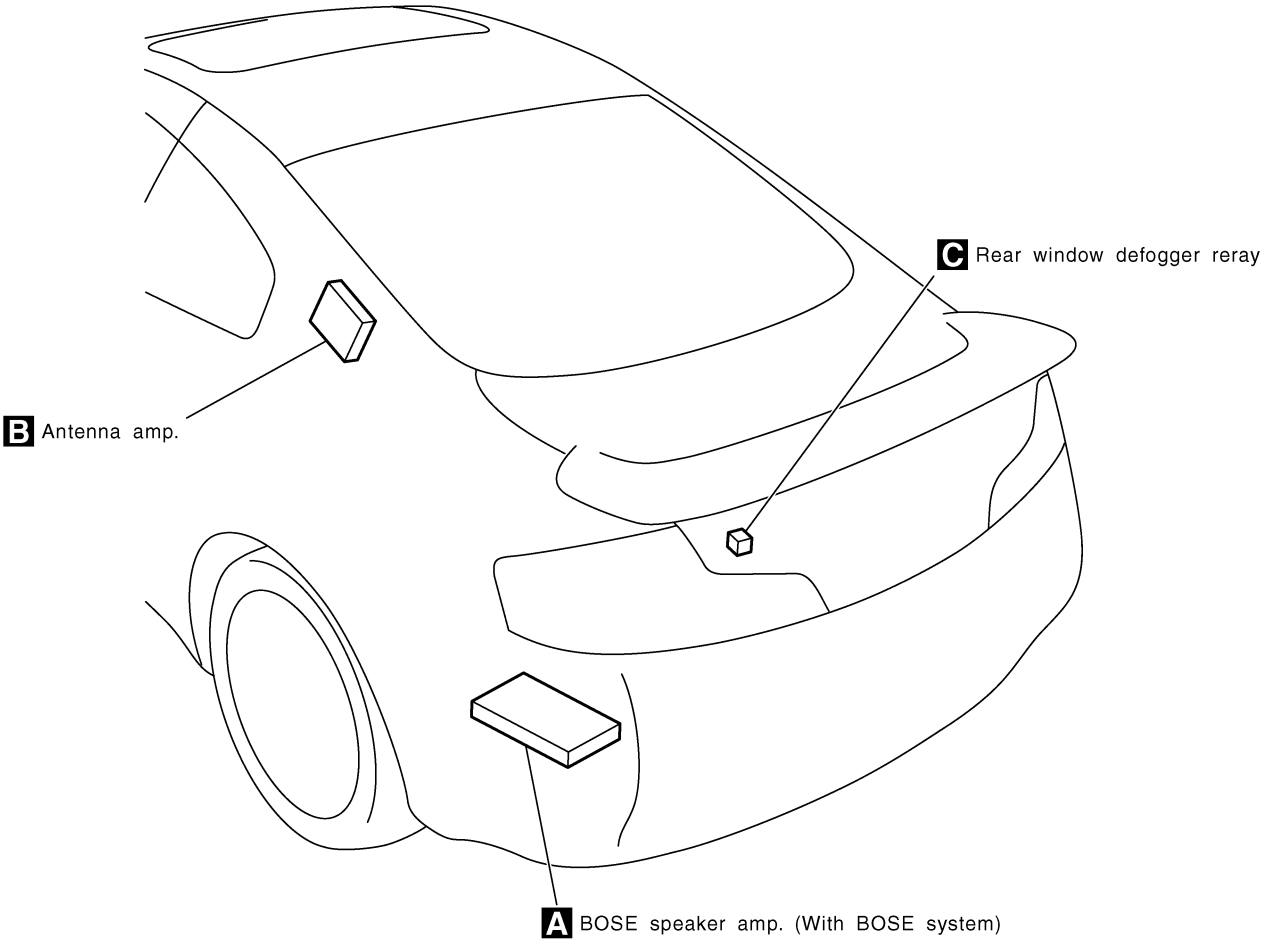


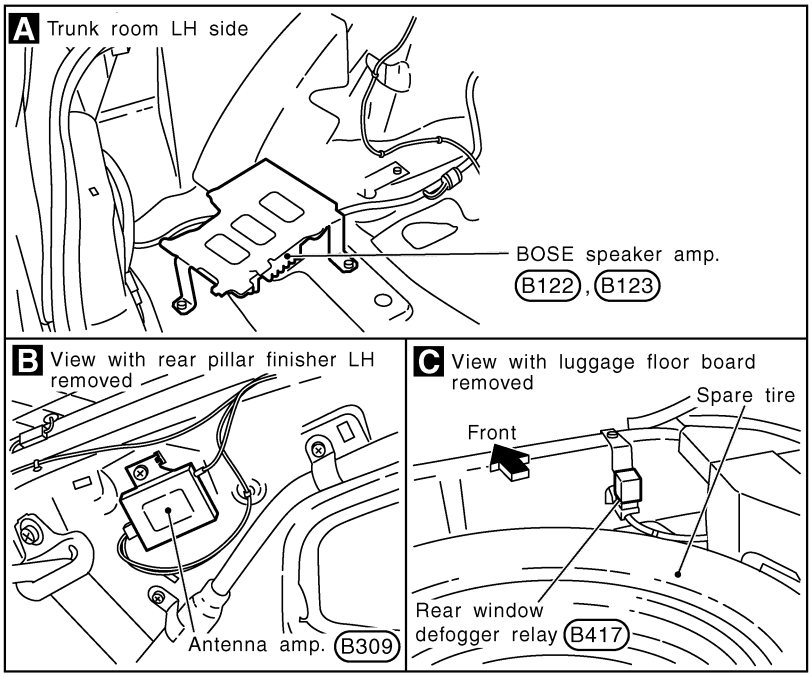
CKIM0265E


B View with lower instrument panel removed
Heated seat relay
M85
Circuit breaker
M14
VDC/TCS/ABS control unit
E118
C View with display and A/C auto amp. removed
GPS antenna
D
Display and A/C auto amp.
M31, M32
E Driver side view with cluster lid A removed
NATS antenna amp.
M27
Ignition key cylinder
F Upper glove box
NAVI control unit
M57, M58, M59, M204
G Blower motor RH side
Remote keyless entry receiver
ECM F108
M78
H Behind the dash side lower RH finisher
A/T PV IGN relay
F105
TCM (Transmission control module)
F103, F104
J Under passenger seat
Front
Passenger side seat control unit
B502
K Under driver seat
Front
Driver side seat control unit
B324
L View with floor console box removed
Air bag diagnosis sensor unit
M55, B13, B403
Yaw rate/side G sensor
M51

CKIM0266E

LUGGAGE COMPARTMENT





CKIT0240E

HARNESS CONNECTOR

PFP:00011

Description

AKS003IE

HARNESS CONNECTOR (TAB-LOCKING TYPE)

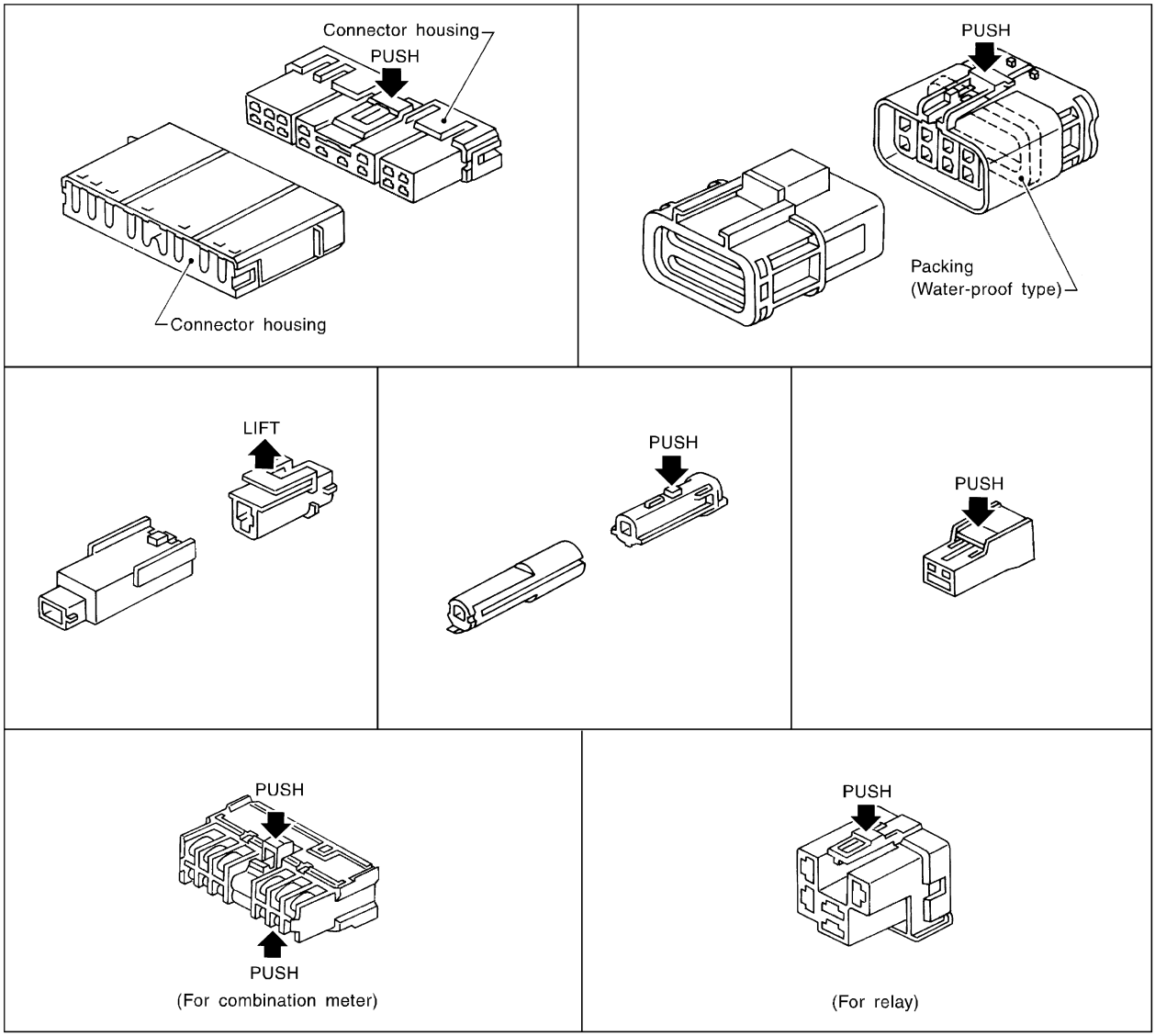
- The tab-locking type connectors help prevent accidental looseness or disconnection.
- The tab-locking type connectors are disconnected by pushing or lifting the locking tab(s). Refer to the illustration below.

Refer to the next page for description of the slide-locking type connector.

CAUTION:

Do not pull the harness or wires when disconnecting the connector.

[Example]



SEL769DA

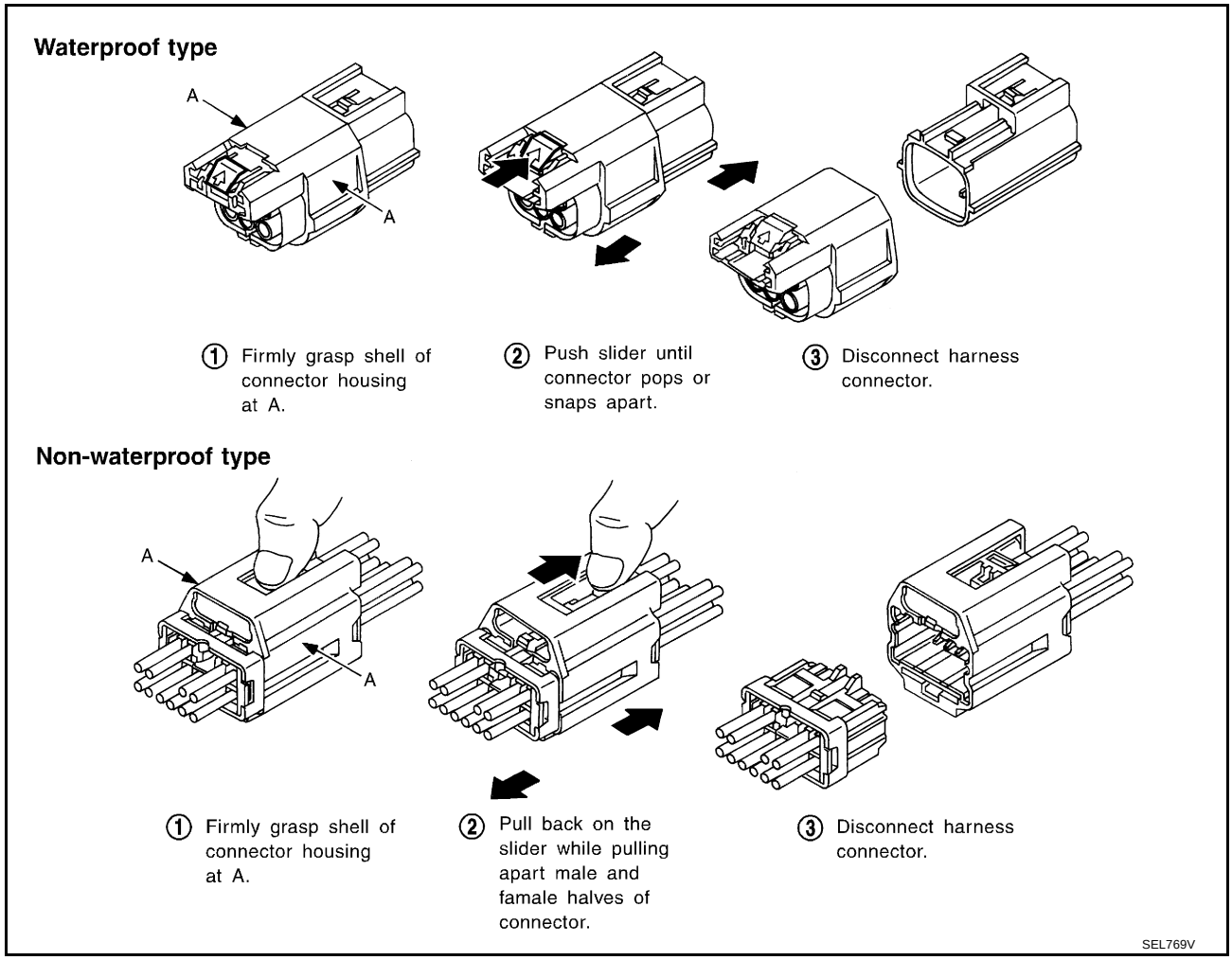
HARNESS CONNECTOR (SLIDE-LOCKING TYPE)

- A new style slide-locking type connector is used on certain systems and components, especially those related to OBD.
- The slide-locking type connectors help prevent incomplete locking and accidental looseness or disconnection.
- The slide-locking type connectors are disconnected by pushing or pulling the slider. Refer to the illustration below.

CAUTION:

- **Do not pull the harness or wires when disconnecting the connector.**
- **Be careful not to damage the connector support bracket when disconnecting the connector.**

[Example]



ELECTRICAL UNITS

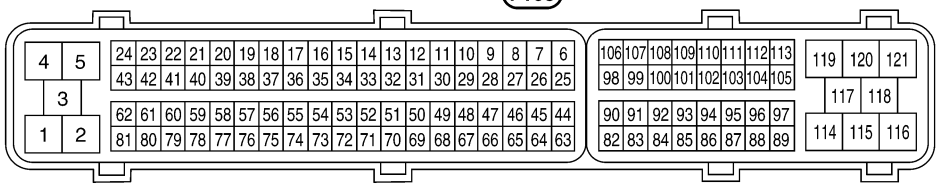
PFP:00011

Terminal Arrangement

AKS003IG

ECM

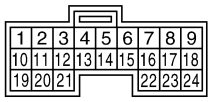
F108



(Black)

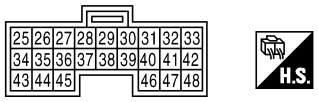
TCM (TRANSMISSION CONTROL MODULE)

F103



(White)

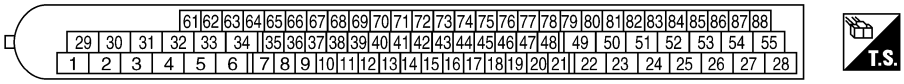
F104



(Gray)

VDC/TCS/ABS CONTROL UNIT

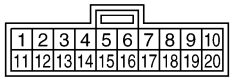
E118



(Black)

DISPLAY AND A/C AUTO AMP.

M31



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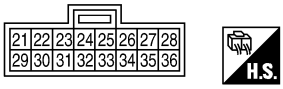
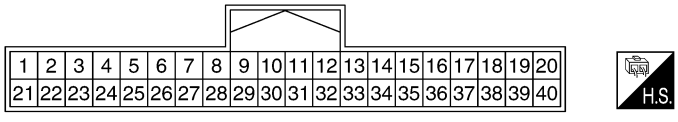
M32



(Gray)

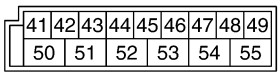
BCM (BODY CONTROL MODULE)

M1



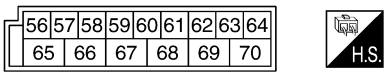
(White)

M2



(Black)

B4



(White)

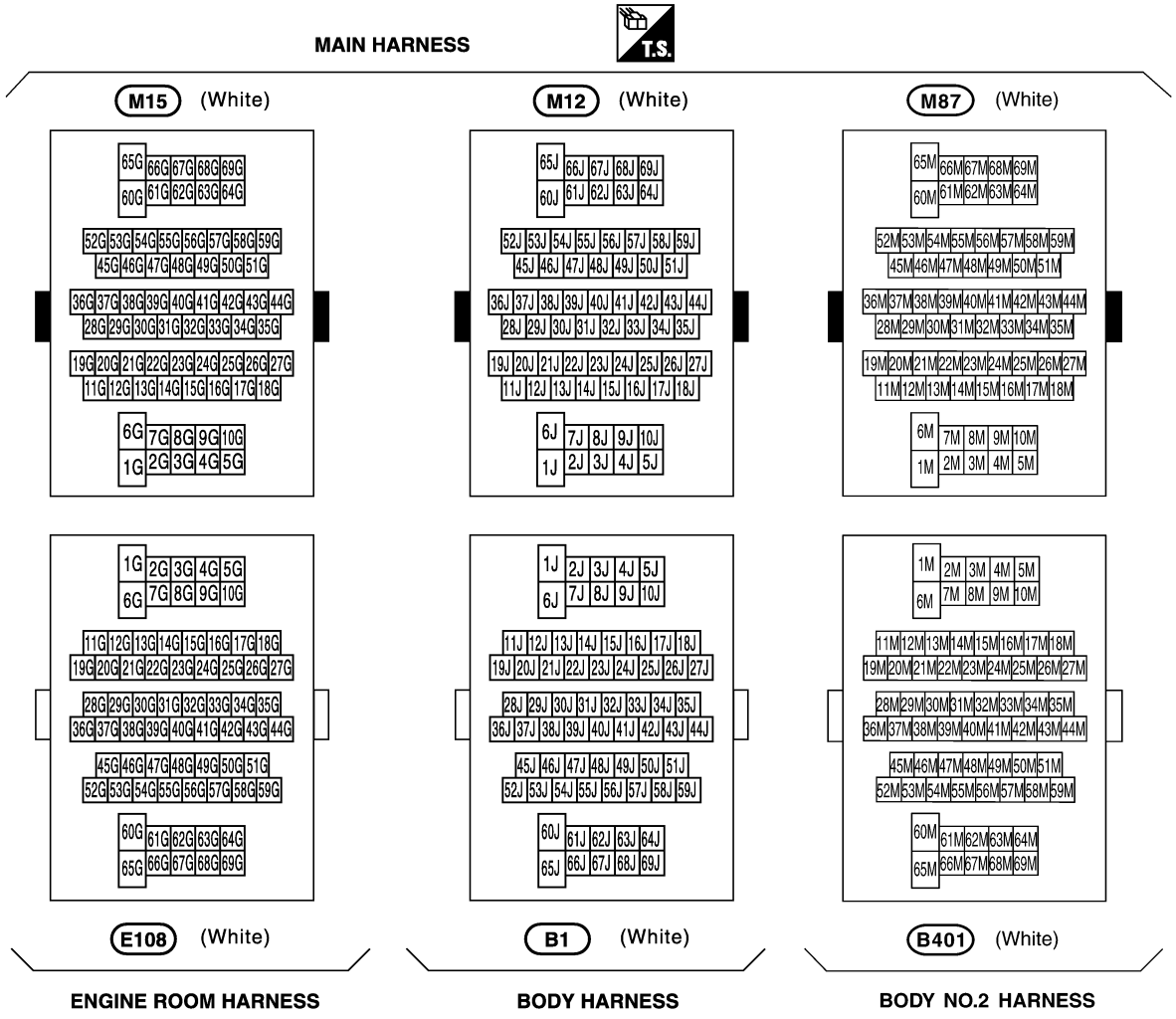
CKIM0268E

SMJ (SUPER MULTIPLE JUNCTION)

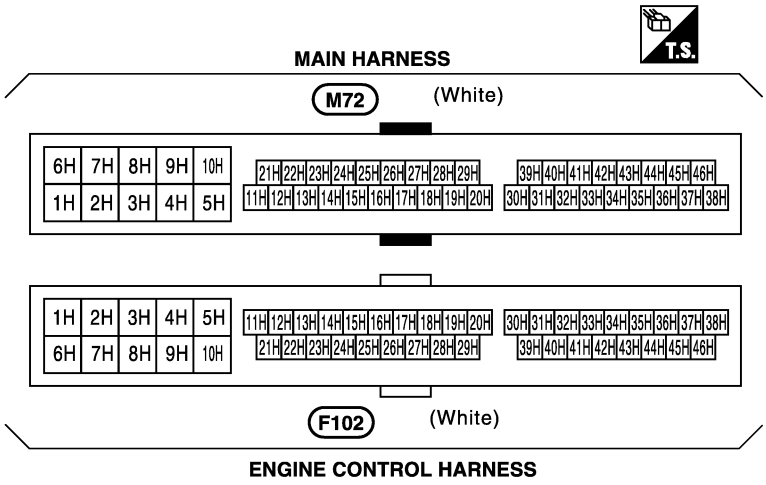
PFP:B4341

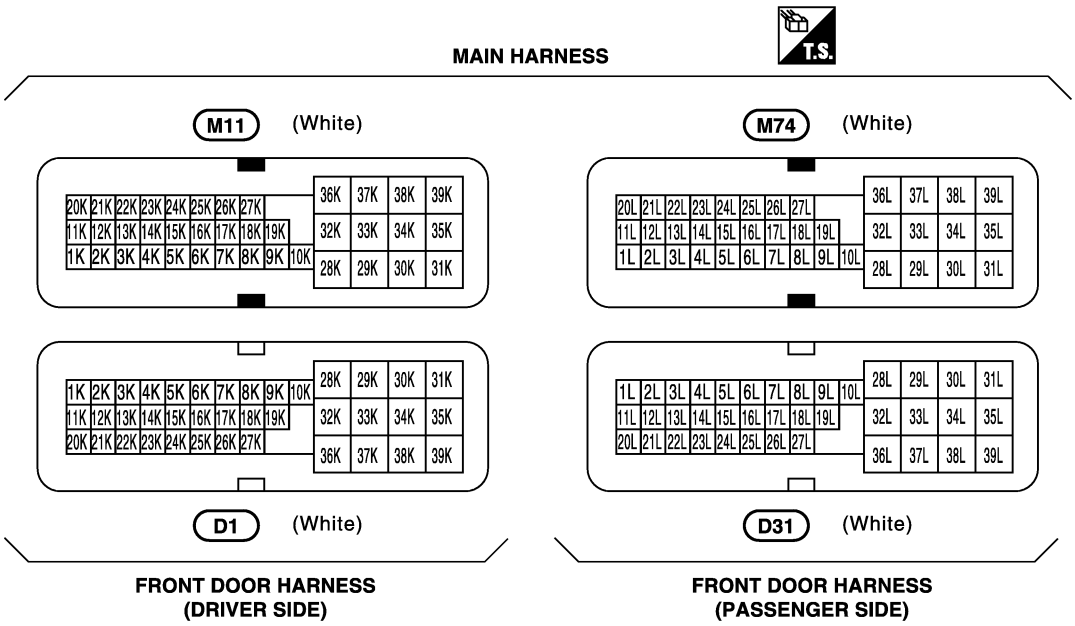
Terminal Arrangement

AKS003IH



CKIT0260E





FRONT DOOR HARNESS
(DRIVER SIDE)

FRONT DOOR HARNESS
(PASSENGER SIDE)

CKIT0158E

STANDARDIZED RELAY

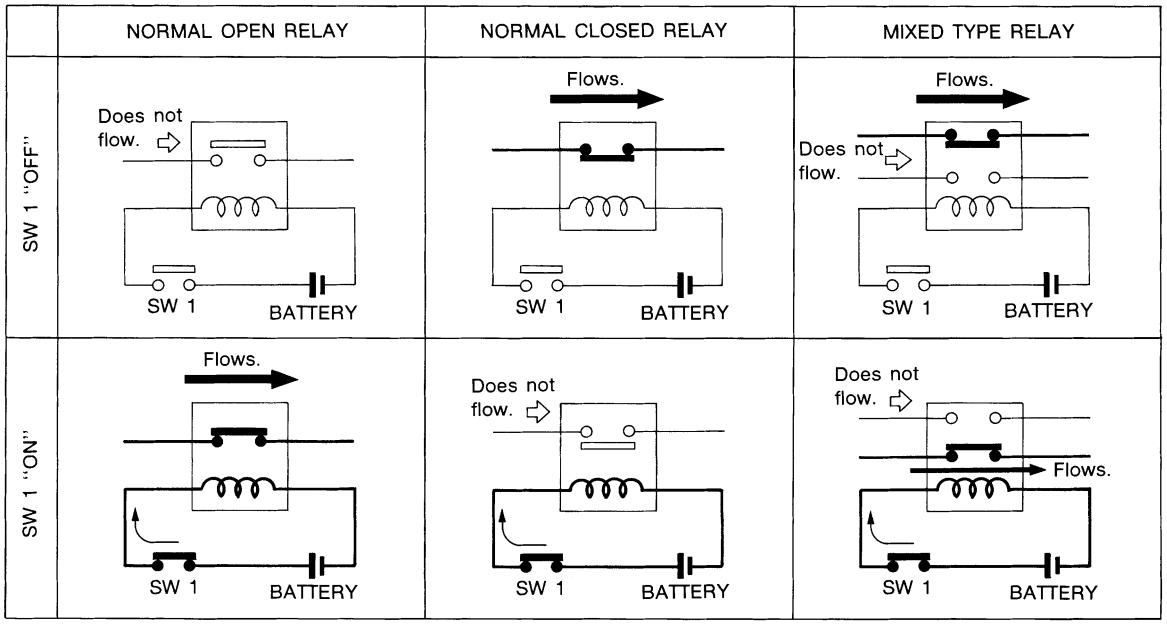
PFP:00011

Description

AKS003II

NORMAL OPEN, NORMAL CLOSED AND MIXED TYPE RELAYS

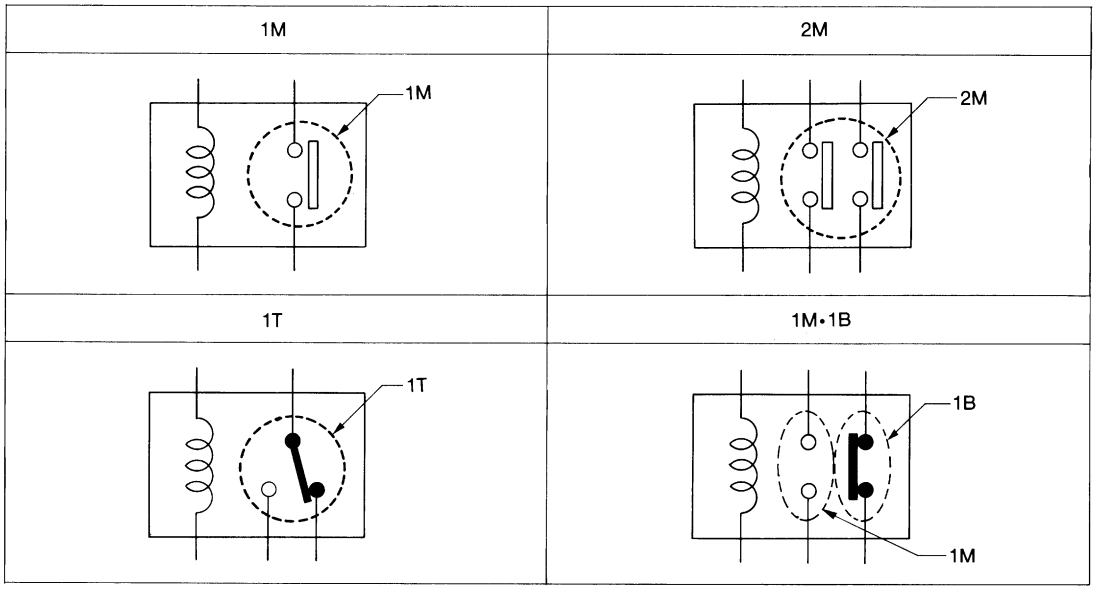
Relays can mainly be divided into three types: normal open, normal closed and mixed type relays.



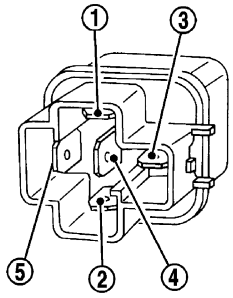
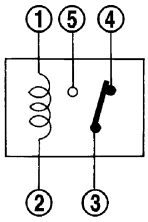
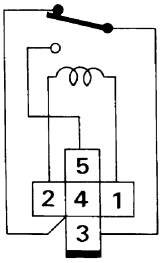
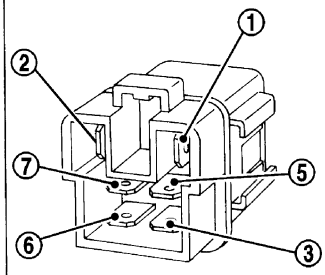
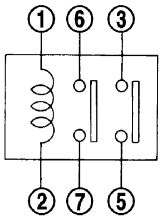
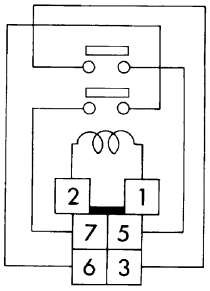
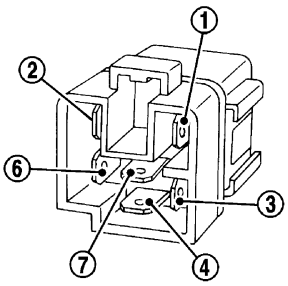
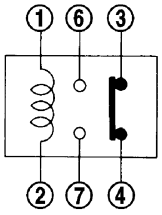
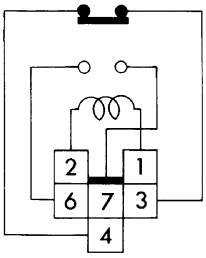
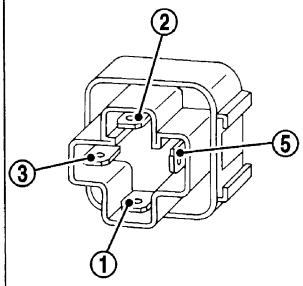
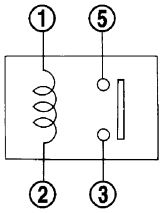
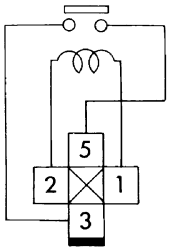
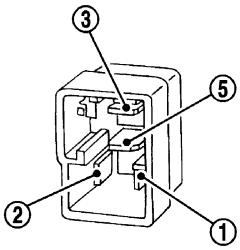
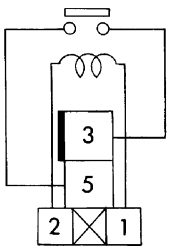
SEL881H

TYPE OF STANDARDIZED RELAYS

1M ····· 1 Make
1T ····· 1 Transfer
2M ····· 2 Make
1M·1B ····· 1 Make 1 Break



SEL882H

Type	Outer view	Circuit	Connector symbol and connection	Case color
1T				BLACK
2M				BROWN
1M•1B				GRAY
1M				BLUE
				

The arrangement of terminal numbers on the actual relays may differ from those shown above.

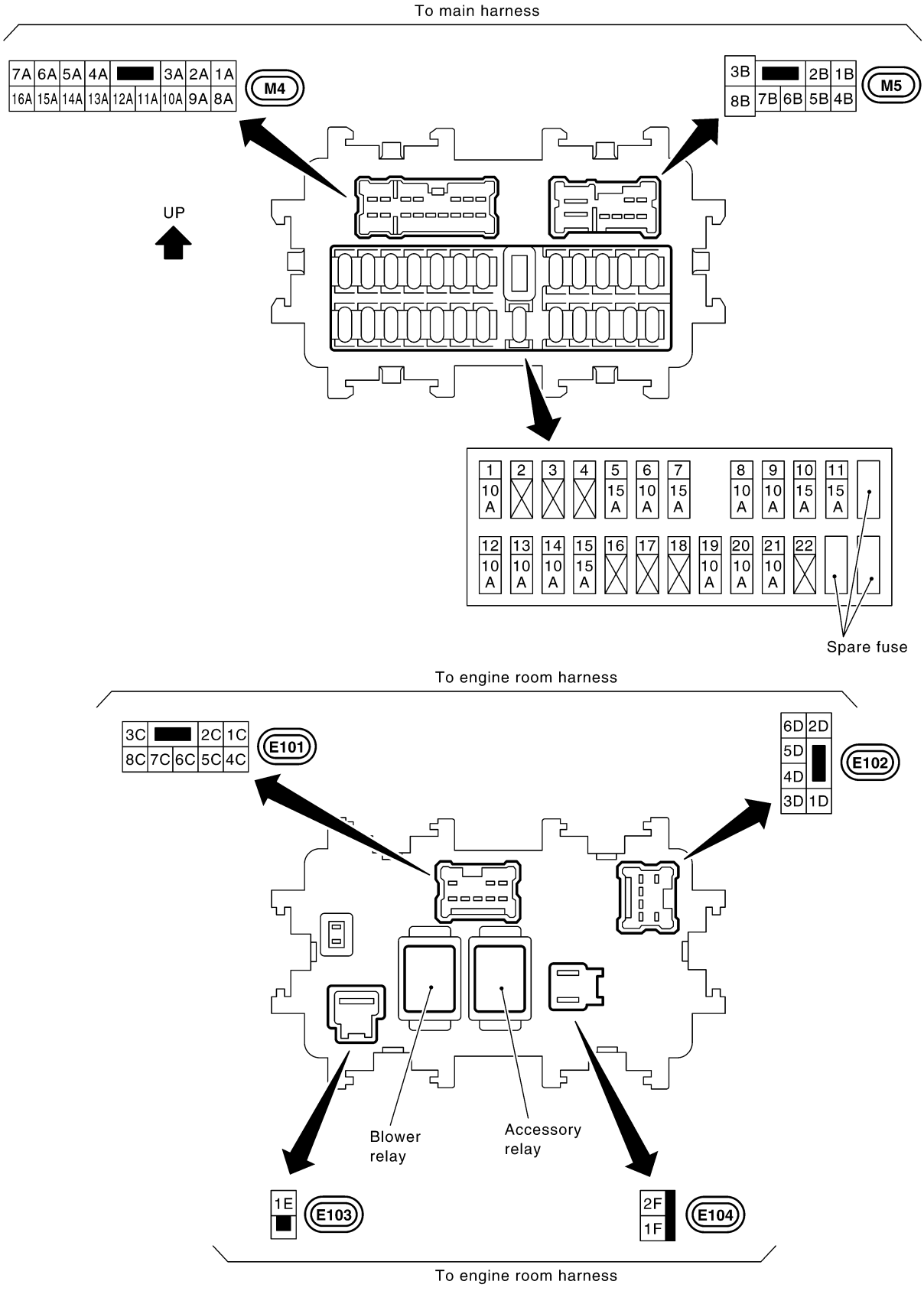
SEL188W

FUSE BLOCK - JUNCTION BOX (J/B)

PFP:24350

Terminal Arrangement

AKS003IJ



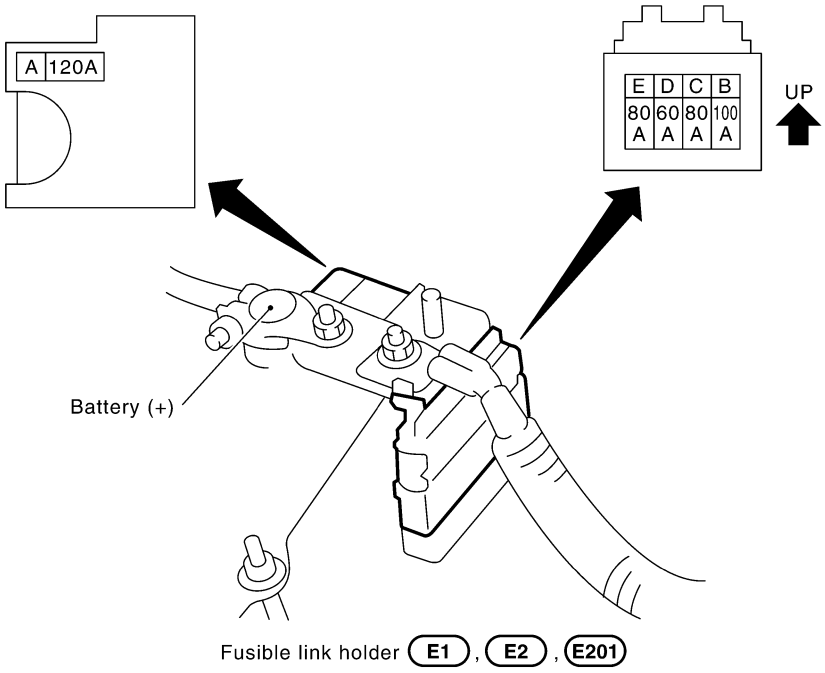
CKIT0261E

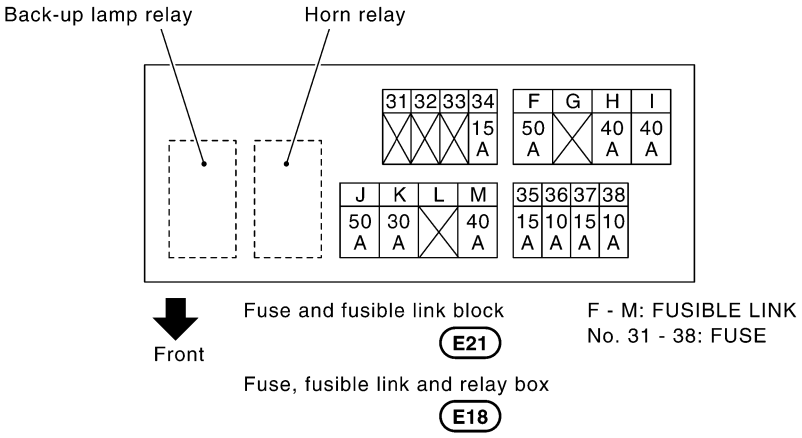
FUSE, FUSIBLE LINK AND RELAY BOX

PFP:24382

Terminal Arrangement

AKS003IK





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